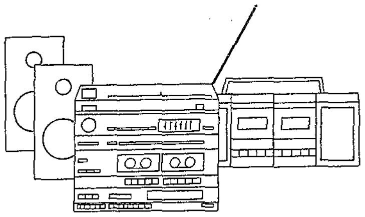
NOKIA
CONSUMER ELECTRONICS



R

1991

NOKIA Unterhaltungselektronik GmbH
Service, Östliche 132, Postfach 15 26
D-7530 Pforzheim

Service-Manual

ITT NOKIA HiFi 8550 CD

Luxor

⚠ **Sicherheitsbauteil!**
Dieses Symbol kennzeichnet in den Schaltbildern alle Bauteile, die nur durch Originalteile ersetzt werden dürfen.

Bei Reparaturen gültige Sicherheitsvorschriften beachten!

⚠ **Safety Component!**
This symbol identifies in the circuit diagrams all safety critical parts. Replace only with specified part numbers.

Service and repair work to be performed only in accordance with existing safety regulations!

⚠ **Composant de protection!**
Ce symbol indique tous les composants dans les schémas,
qui doivent être remplacés uniquement par des pièces d'origines.

Pendant le dépannage respecter les régulations du sécurité!

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Modifications reserved
Modifications réservées

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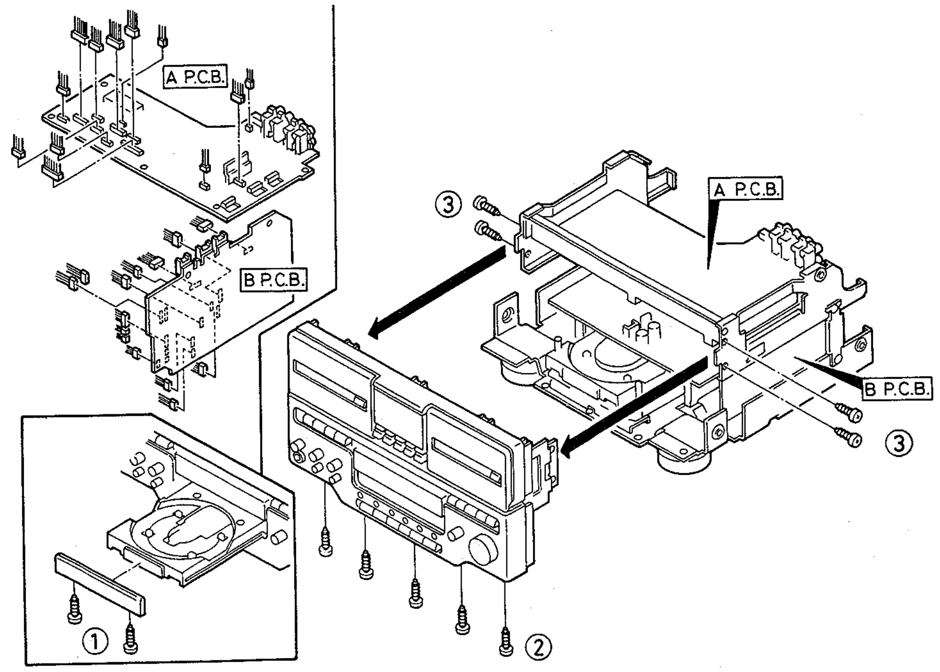
Für Ihre Notizen:
For your notes:
Pour vos notices:

HOW TO DISASSEMBLE THE SET

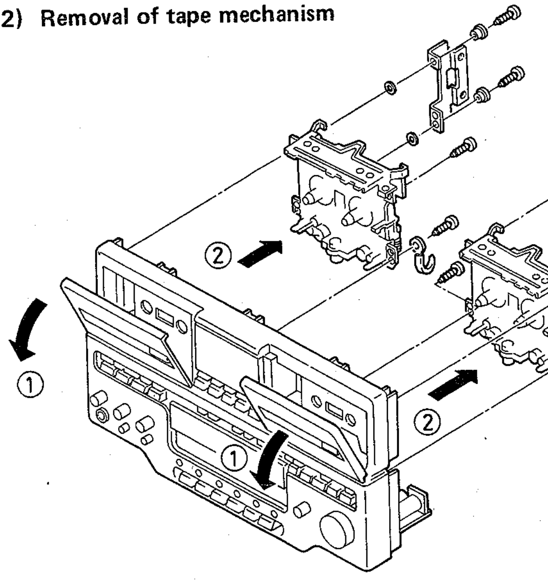
- Remove the compact disc if there should be one on the disc tray.
- Switch the power OFF, and unplug the AC power cord from an AC outlet.
- Disassemble in the numerical sequence.

(1) Removal of front panel

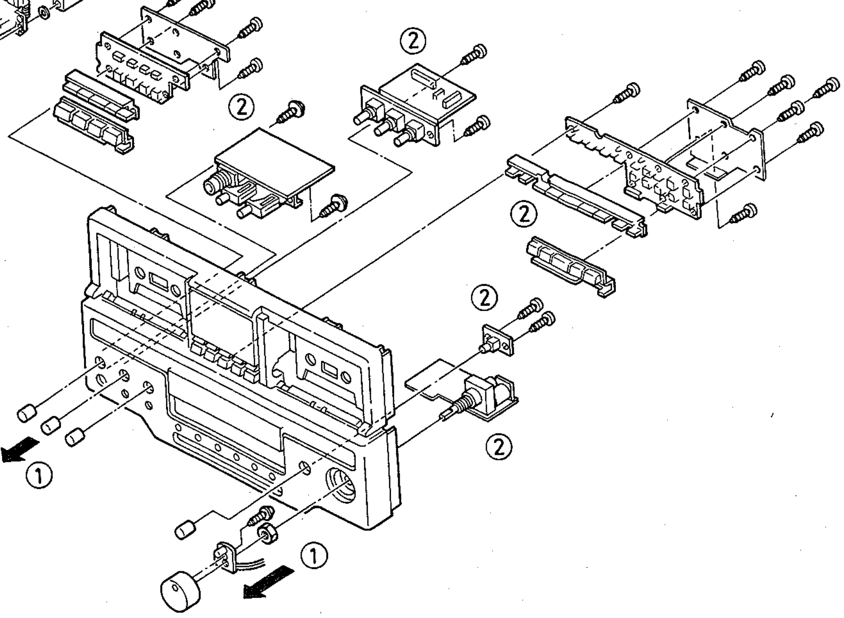
When reassemble the PCB, consult a wiring connection diagram.



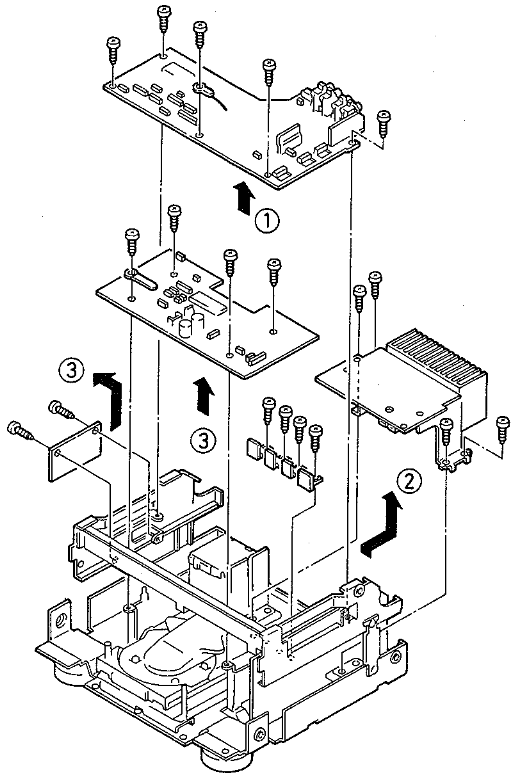
(2) Removal of tape mechanism



(3) Removal of PCB of front panel part

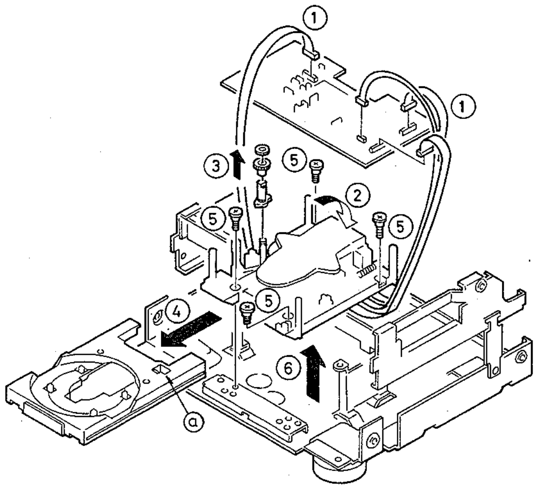


(4) Removal of PCB of bottom cabinet



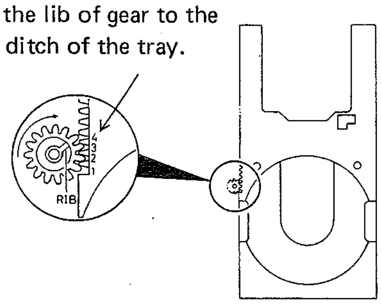
(5) Removal of CD mechanism and disc tray

- Pull out the disk tray, as push ⓐ hook.



- When reinserting the disc tray, meet the tip of the disc tray with the boss of the gear as shown in figure.

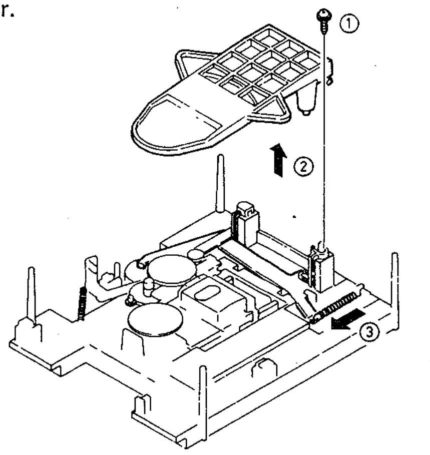
Note: Match the lib of gear to the fourth ditch of the tray.



(6) Replacement the pick-up

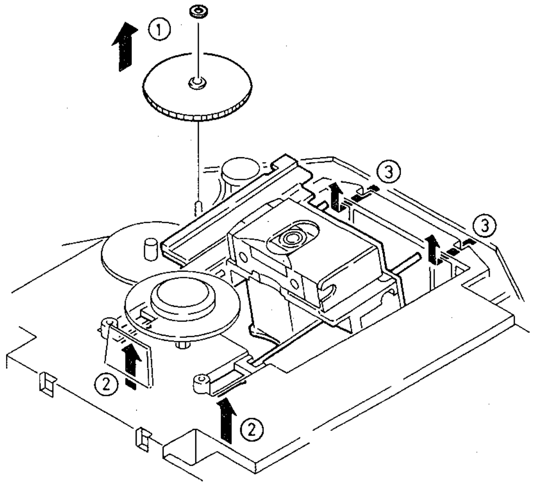
a. Removal of disk chuck lever

Pull the lever to front side ③ when reassemble disc chuck lever.

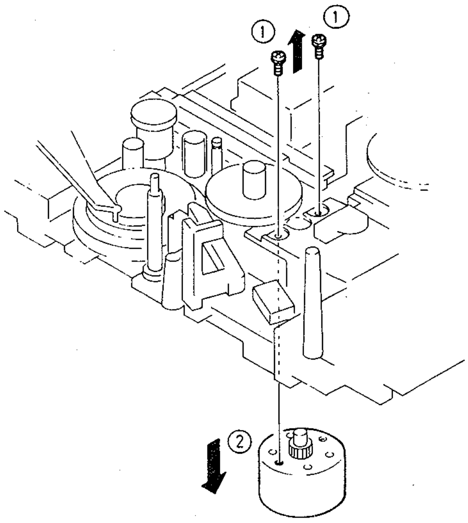


b. Removal of pick-up

Push the shaft ③ to front side as to push up the lib ② and be free the shaft.



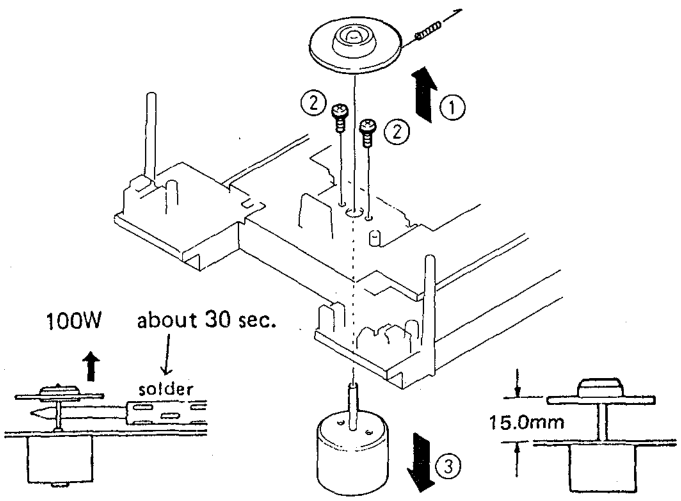
(7) Removal of the sled (loading) motor



(8) Removal of the spindle motor

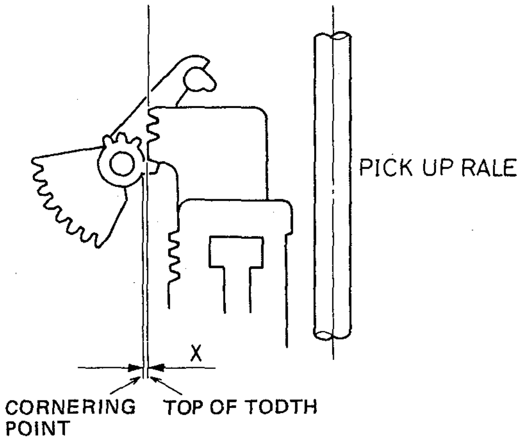
Insert the solder between turn table and base mechanism chassis when dissolve the adhesive cement. And then, add to heat with 100W solder about 30 sec.

Note: When reassemble the turn table, choise the metal turn table, even if repair the spindle motor, as above it.


②
①
②
100W
about 30 sec.
solder
15.0mm
③

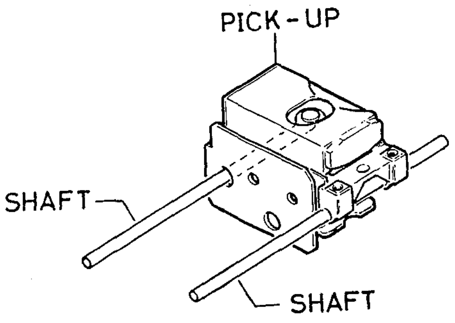
(9) Pick-up transported rack gear alignment

Should be X = 0 ~ 0.1mm


PICK UP RALE
X
CORNERING POINT
TOP OF TODTH

(10) Pick-up replacement

Disassembly the pick-up as follows.

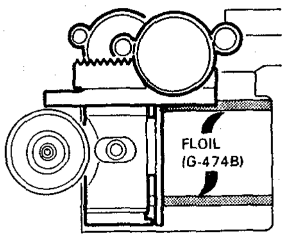

PICK-UP
SHAFT
SHAFT

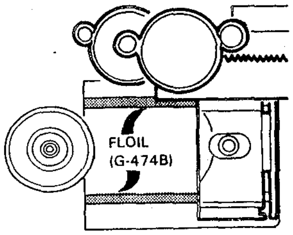
a. When replacing the pick-up, carefully wipe away the grease from the shafts on which the pick-up is mounted.

b. Replace the pick-up.

c. Move the pick-up to the position at the left side, and then apply a coating of floil (G-474B) to the two shafts.

d. Move the pick-up to the right side and apply floil to the remaining parts of the shafts.


FLOIL
(G-474B)


FLOIL
(G-474B)

ADJUSTMENT (TUNER)

NOTE:
1. Power source voltage is DC 12V.
2. Use a screw driver with plastic grip for all adjustment.
3. Signal input must be kept as low as possible to avoid overload.
4. Use an output meter of the highest possible sensitivity.
5. Adjust the intermediate frequency of AM and FM to the frequency of ceramic filter.

(1) FM Band

Antenna: 75 ohm open SG direct, Standard modulation frequency: 1 kHz, Deviation: 75 kHz (Mono)
Output: −72dB

ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
Clock (Time Error)				**	Frequency counter	TP401 (H) TP402 (E)	CT401	1.048576 MHz ± 2 Hz
Tuning Coverage	Low	87.5MHz	—	—	Digital Voltmeter	TP101 (H) TP102 (E)	Confirm	1.3V
	High	108.0 MHz					L104	8.0 ± 0.05V
Tracking	Low	90.0 MHz	FM-SG (10dB)	FM ANT Terminal	VTVM Oscilloscope	TP302 (L) TP303 (R) TP304 (E)	L102 L103	Max.
	High	106.0 MHz					CT101	
IF S-curve (Distortion factor)		98.0 MHz	FM-SG (66dB)	FM ANT Terminal	Digital Voltmeter	TP201 (H) TP202 (E)	T202	0 ± 0.05V
S.D. (Station Detector)		98.0 MHz	FM-SG (22dB)	FM ANT Terminal	Digital Voltmeter	TP203 (H) TP204 (E)	SVR201	Less than 4V
VCO (19 kHz)		98.0 MHz	FM-SG (72dB)	—	Counter	TP301 (H) TP304 (E)	SVR301	19kHz±50Hz
Separation		98.0 MHz	FM-SG (72dB) Stereo Modulator*	FM ANT Terminal	VTVM Oscilloscope	Tuner out (L or R)	SVR302	L/R-ratio Max.
Distortion		98.0 MHz	FM-SG STEREO MODULATOR (L only or R only) 66dB	FM ANT	Distortion meter	Tuner out (L or R)	T201	Min.

* Stereo modulator: Deviation Main (L + R) . . . ±40 kHz
Pilot (19kHz) . . . 6.75 kHz

** Connect temporaly to TP407 and TP404 in the Power off mode.

(2) MW Band

Antenna: IRE Loop antenna, Standard modulation: 1 kHz 30%

ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
Tuning Coverage	Low	522 kHz	—	—	Digital Voltmeter	TP101 (H) TP102 (E)	L153	1.3 ± 0.02V
	High	1611 kHz					CT153	8.0 ± 0.05V
Tracking	Low	603 kHz	AM-SG (80dB)	Loop ANT.	VTVM Oscilloscope	TP302 (L) TP303 (R) TP304 (E)	L151	Max.
	High	1404 kHz					CT151	
S.D. (Station Detector)		999 kHz	AM-SG (85 dB)	Loop ANT.	Digital Voltmeter	TP203 (H) TP204 (E)	SVR202	Less than 4V

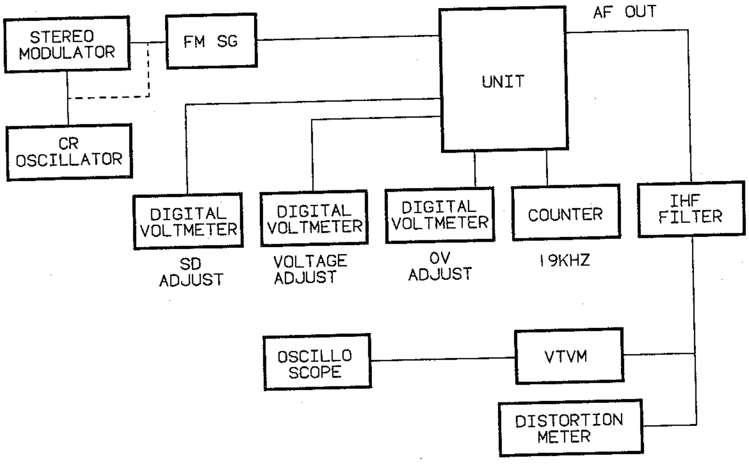
(3) LW Band

Antenna: IRE Loop antenna, Standard modulation: 400 Hz 30%

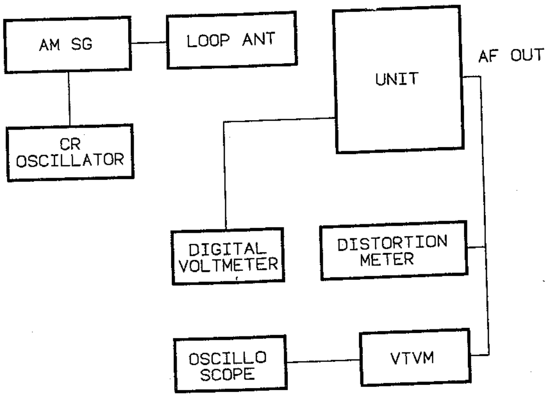
ITEMS		FREQUENCY INDICATED POSITION	INPUT CONDITIONS		OUTPUT CONDITIONS		ADJUSTING PARTS	STANDARDS
			MEASURING INSTRUMENTS	CONNECTIONS	MEASURING INSTRUMENTS	CONNECTIONS		
Tuning Coverage	Low	144 kHz	—	—	Digital Voltmeter	TP101 (H) TP102 (E)	L154	1.6 ± 0.03V
	High	290 kHz					CT154	7.0 ± 0.05V
Tracking	Low	162 kHz	AM-SG (84dB)	Loop ANT.	VTVM Oscilloscope	TP302 (L) TP303 (R) TP304 (E)	L152	Max.
	High	279 kHz					CT152	

ADJUSTMENT CONNECTION

FM ADJUSTMENT CONNECTIONS

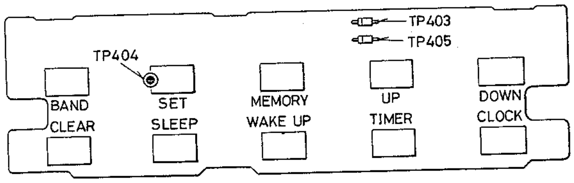

STEREO MODULATOR
FM SG
UNIT
AF OUT
CR OSCILLATOR
DIGITAL VOLTMETER
SD ADJUST
DIGITAL VOLTMETER
VOLTAGE ADJUST
DIGITAL VOLTMETER
OV ADJUST
COUNTER
19KHZ
IHF FILTER
OSCILLO SCOPE
VTVM
DISTORTION METER

MW/LW ADJUSTMENT CONNECTIONS

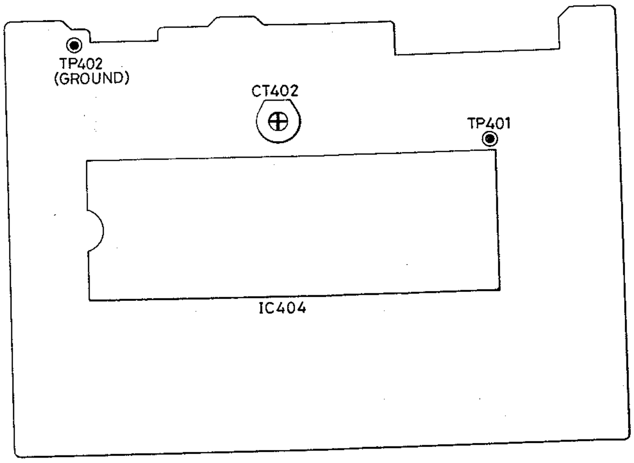

AM SG
LOOP ANT
UNIT
AF OUT
CR OSCILLATOR
DIGITAL VOLTMETER
DISTORTION METER
OSCILLO SCOPE
VTVM

PARTS LOCATION (TUNER)

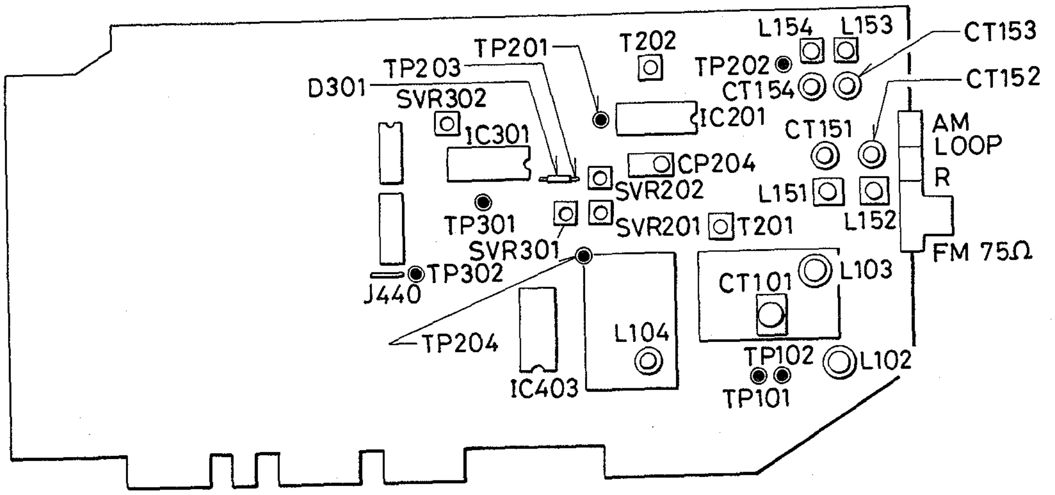
TUNER SWITCH PCB


TP403
TP405
TP404
BAND
CLEAR
SET
SLEEP
MEMORY
WAKE UP
UP
TIMER
DOWN
CLOCK

FL DISPLAY TUNER PCB


TP402
(GROUND)
CT402
TP401
IC404

TUNER/PRE AMP PCB



LASER BEAM SAFETY PRECAUTIONS

If the disk chuck lever is removed, the pick-up is exposed. Do not look at the pick-up with the power switch ON.

Do not look directly at the laser beam coming from the pick-up or allow it to strike against your fingers, skin, etc.

Do not apply power if there is a broken part in the laser output section of the pick-up.

Structural Safety Interlock
This model has a disc chuck lever and top lid. This disc chuck lever and top lid prevent to expose the laser beam for users.

5. HANDLING THE PICK-UP

1. **Shipping and storage cautions**
   a. The pick-up must be stored in a conductive bag until immediately prior to its use.
   b. Do not drop it or subject it to impacts.
2. **Repair cautions**
   a. When handling the pick-up, be careful not to give it undue force or shock by your hands. Otherwise the pick-up may malfunction or the PCB may be cracked.
   b. **The pick-up which has been minutely adjusted before shipment as one part. Never touch and move the adjusting points and setscrews of the pick-up unless otherwise described in the item of adjustment to avoid damage.**
   c. A strong magnet is used in the pick-up.
   Do not bring a magnet or other magnetized object near to it.
   d. **Cleaning the lens**
   * If dust gets on the lens, clean it away by using an air brush such as used for a camera lens.
   * The lens is held in place by a spring.
   If the center of the lens is dirty, carefully clean it using cotton swab moistened with **isopropylalcohol.** Since special coating is made on the surface of the lens which is made of plastics, do not use other kind of alcohol and cleaning fluid to prevent damage to the lens. Also, be carefull not to bend the lens spring when cleaning.

6. BEFORE REPAIRING THE CD PLAYER

1. **Preparations**
   a. Many ICs, LSI and the pick-up (laser diode) are used in the compact disc player. These components are sensitive to static electricity, and might be damaged by static electricity or high voltage, so particular care should be taken regarding this point.
   b. Many precision components and the lens are used in the pick-up.
   Never attempt to make repairs, or to store parts, where the temperature or humidity is high, where magnetism is strong, or where there is much dust.
2. **Notes regarding repairs**
   a. Be sure to first disconnect the power plug before attempting to replace any component.
   b. All tools, instruments, etc., used for measuring must be grounded.
   Grounding can be accomplished by using a conductive metal sheet on the work bench.
   c. To prevent AV leakage of the soldering iron, ground its metal part.
   d. Repair personnel must be grounded.

ADJUSTMENT (CD)

A. CD Mechanism Block (adjust or pressure against ratchet gear)

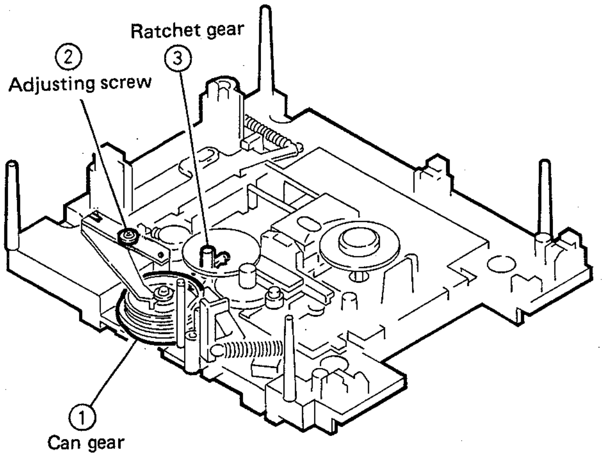


Fig-1

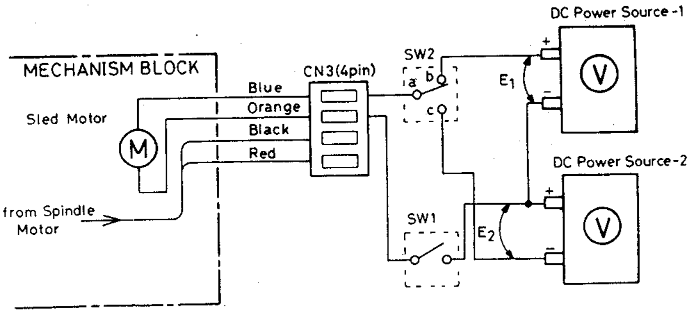


Fig-2

1. Connect the Mechanism to the instrument (DC Power Source & SW) as shown in figure 1.
2. With E1 = 5.0 ± 0.05V, operate SW2 to close contacts a-b. innermost position, initiate the mechanism open operation so that the cam gear stops at the open end position.
3. With voltage applied as described in (2), loosen the adjustment screw ② and operate the ratchet.
4. Tighten the adjustment screw until the operation of the ratchet gear ① stops.
5. Then, with E2 = 4.2V, operate SW2 to close contacts a-c. Switch off SW1 when the chucking lever starts to move.
6. With E1 = 4.6 ± 0.05V, operate SW2 to close contacts a-b, switch on SW1, and check to be sure that the ratchet does not operate even if the cam gear is at the open end position.
7. Operate SW2 to close contacts a-c, and switch off SW1 if the chucking lever begins to move.
8. With E1 = 5.3 ± 0.05V, operate SW2 to close contacts a-b, and switch on SW1. Check to be sure that the ratchet operates when the cam gear reaches the open end position.
9. Use Cemedine #575 to secure the space between the outer circumference of the adjustment nut and the spring plate.

○ The starting voltage of ratchet operating must be between 4.6V and 5.5V.

If the adjustment described above is difficult to make, repair as described below.

Case 1: The adjustment screw is tightened almost for the adjustment (4), but the check in (6) in NG.

Countermeasure

The problem may be that the play of the vertical two-step ratchet gear is excessive, so add a 0.13t polyslider washer to the 0.25t polyslider washer located beneath the ratchet gear. As a confirmation, other than the adjustment described previously, the pick-up sending current must be within the allowable range.
Pick-up sending current: 8.0 mA ~ 20 mA

Case 2: If, as a result of the confirmation in (8), the ratchet is not operating, or if the pick-up transport current is high, follow the steps below.

Countermeasure

Because it is possible that the problem is not play of the vertical two-step ratchet gear, but that the ratchet gear is being constantly pressed, replace the 0.25t polyslider washer (located beneath the ratchet gear) with a 0.13t polyslider washer.

B. Electrical Adjustment

So far we have presented explanations regarding compact disc player handing, notes prior to repair, handing the pick-up and disassembly of the unit. Be sure to carefully read these instructions before making any adjustments.

Test discs Required for Adjustments and Checks

No.	Designation	Description (manufacturer)
1	414 245-2	for demonstration (Polygram)
2	YEDS-7	−10dB .1KHz (Sony)

Note: Test discs are subject to change without notice.

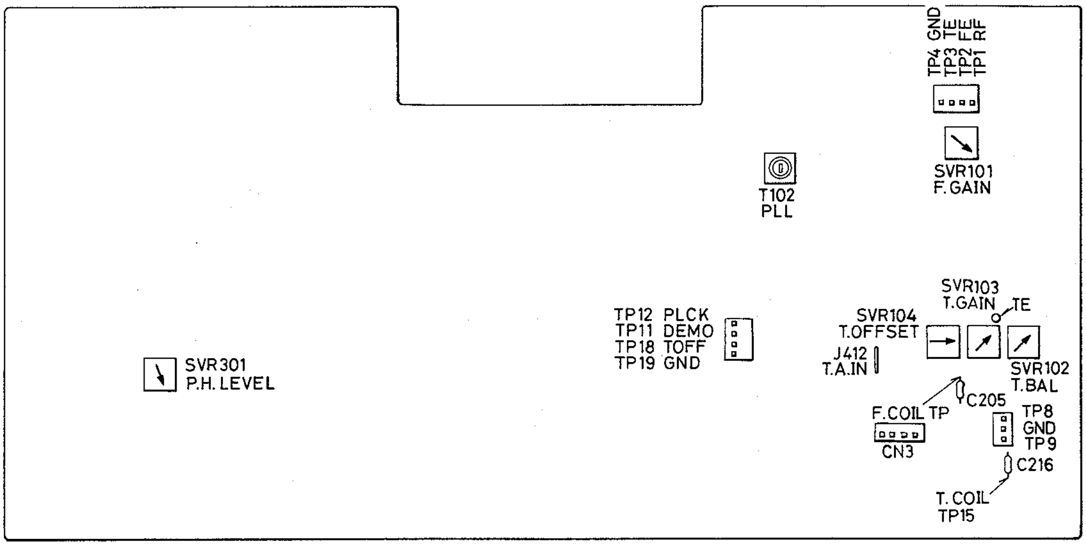
Measuring Instruments Required for Adjustments

Designation	Model	(manufacturer)
Oscilloscope	SS5711 (100MHz, 3 phenomena observation)	(Iwasaki Communications)
Storage scope	DSS6521 (memory scope)	(Kikusui Electric)
AC digital voltmeter	Digital tester or digital multi-meter can also be used.	
AF oscillator	Low frequency oscillator	
Band pass filter	See attached figure below	
Frequency counter	More than 5MHz	
Driver for grating	614 152 1534	(SANYO)

Notes:
1. Adjustments are also possible by using instruments from other manufacturers if the performance corresponds to that described above.
2. Use a probe when using an oscilloscope, storage scope, digital voltmeter to observe the signal. Be sure to connect the probe ground to the indicated ground line.

1. Initial Set-up

The initial set position of the adjustment controls are shown in figure below.


TP4 GND
TP3 TE
TP2 FE
TP1 RF
SVR101
F.GAIN
T102
PLL
SVR103
T.GAIN
TE
SVR104
T.OFFSET
TP12 PLCK
TP11 DEMO
TP18 TOFF
TP19 GND
J412
T.A.IN
SVR102
T.BAL
SVR301
P.H. LEVEL
C205
F.COIL TP
CN3
TP8
GND
TP9
C216
T. COIL
TP15

2. PLL-VCO (Phase Locked Loop Voltage Control Oscillator) Adjustment

1. Connect the frequency counter to TP12 and TP19 (or chassis).
2. Turn on the power of the unit.
3. Adjust T102 so that the frequency counter shows 4.30 ± 0.005MHz.

* If this adjustment is imperfect, get the long seek time, not read TOC, not sound. In the worst case, become high speed tuning, reverse tuning and it may wound the Disc.

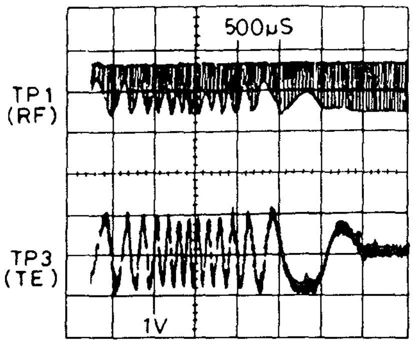
3. Tracking Offset pre-adjustment (Pre-adjustment of SVR104)

1. Take off the CN3 (Sled, Spindle Motor)
2. Connect the oscilloscope to TP15 (Tracking coil) and TP4 (GND.).
3. Connect TP18 (TOFF) to TP19 (GND.).
4. Turn on the power.
5. Adjust SVR104 so that the voltage of TP15 is shown 60mV ± 20mV.

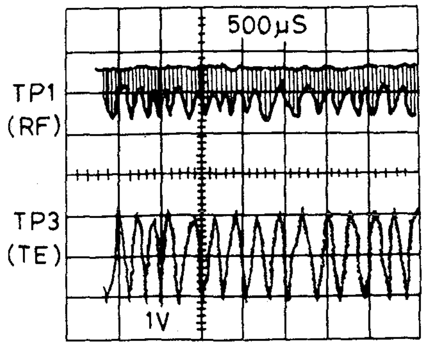
* If this adjustment is imperfect, inferior playability and can not playback the Disc.

4. Tracking Balance Adjustment (SVR102)

1. Connect the oscilloscope to TP3 (TE) and TP4 (GND.).
2. Turn on the power of the unit.
3. Play the test disc.
4. Continue doing to press the SEARCH ▶▶ or ◀◀ button to do it.
5. Adjust SVR102 so that the TE (Tracking Error) signal waveform of TP3 on the oscilloscope is vertically symmetrical relative to 0V. (See figure below)



(a)



(b)

* If the adjustment is imperfect, become run away the spindle motor (pick-up sending motor), inferior playability.

Adjustment by the traverse waveform

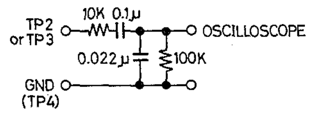
1. Follow steps 1, 2 and 3 as above.
2. Rotate SVR103 (Tracking gain) to the left end, or connect the STW 10mm (J412, T.A.IN) to GND. (see PARTS LOCATION)
3. At the same time to load the test disc, it is observed the traverse waveform at TP3 during 5 sec.
   Adjust SVR102 so that it's waveform on the oscilloscope is vertically symmetrical relative to 0V. (see Figure (b) above).

5. Focus Gain Adjustment (SVR101)

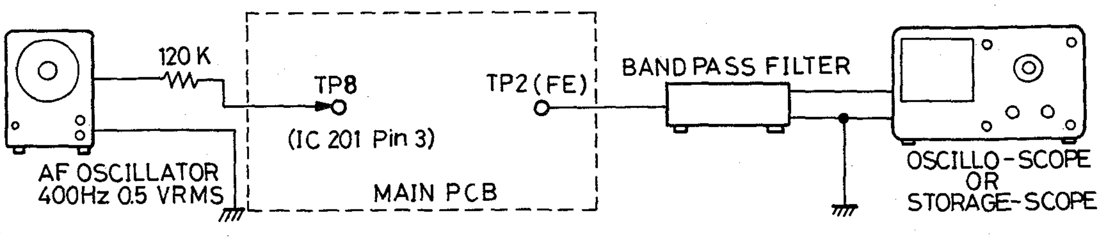
1. Connect the storage scope to TP2 (F.E) by the Band pass filter 1 (See BPF1 Figure).
2. Turn on the power of the unit.
3. Playback the test disc.
4. Set the output of AF oscillator to 400Hz, 0.5V rms and connect to TP8 (IC201 pin 3) by resistor 120K ohm.
5. Adjust SVR101 so that the voltage of F.E signal waveform on the storage scope is 1Vp-p by through BPF1.

* If this adjustment is imperfect, become weak the mechanical shock, inferior playability, and can not playback the Disc.

BPF 1


10K
0.1μ
TP2 or TP3
OSCILLOSCOPE
0.022μ
100K
GND (TP4)

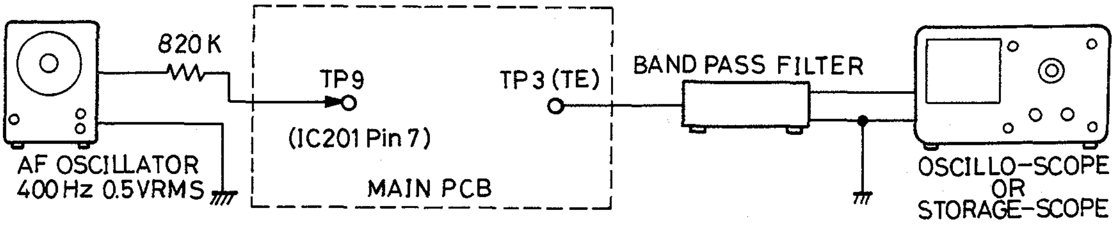
BAND PASS FILTER 1


120 K
TP8
(IC 201 Pin 3)
TP2 (FE)
MAIN PCB
BAND PASS FILTER
AF OSCILLATOR
400Hz 0.5 VRMS
OSCILLO-SCOPE
OR
STORAGE-SCOPE

6. Tracking Gain Adjustment (SVR103)

1. Connect the storage scope to TP3 (T.E) by the Band pass filter 1 (See BPF1 Figure).
2. Turn on the power of the unit.
3. Playback the test disc.
4. Set the output of AF oscillator to 400Hz, 0.5V rms and connect to TP9 (IC201 pin 7) by resistor 820K ohm.
5. Adjust SVR103 so that the voltage of the T.E signal waveform on the storage scope is 1Vp-p by through BPF1.

* If this adjustment is imperfect, become weak the mechanical shock, inferior playability, and can not playback the Disc.


820K
TP9
TP3 (TE)
BAND PASS FILTER
(IC201 Pin 7)
MAIN PCB
AF OSCILLATOR
400Hz 0.5VRMS
OSCILLO-SCOPE
OR
STORAGE-SCOPE

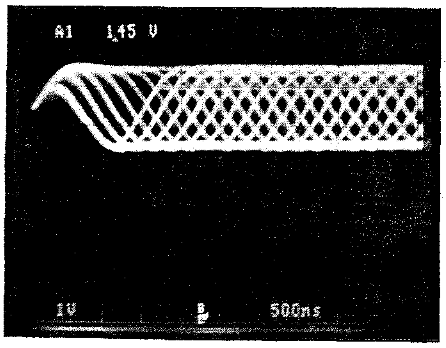
7. Peak Hold Adjustment (SVR301)

1. Turn on the power of the unit. Set the function switch to "CD" mode.
2. Playback the test disc (No. 2 −10dB, for example: YEDS-7 Track No. 18)
3. Adjust SVR301 so that the voltage (IC301 pin 26, 27) indicates the numeric as shown the following table.

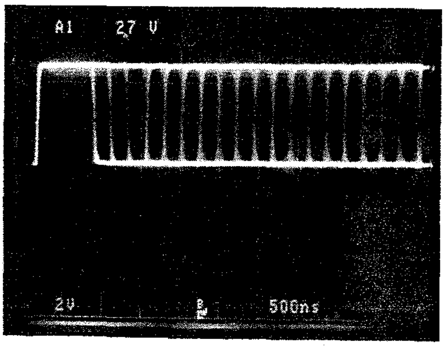
Pin No.	Voltage
26	5.1 ± 1.0V
27	0 ± 1.0V

NORMAL WAVE FORM OF TEST POINT

① TP1
RF signal

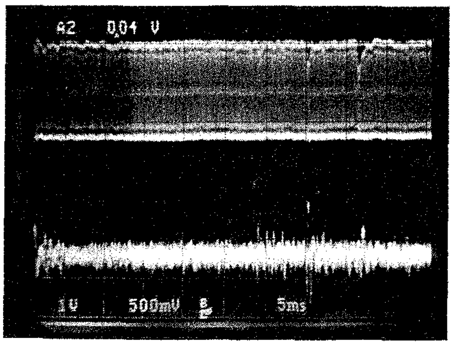


② IC401-6
EFM signal



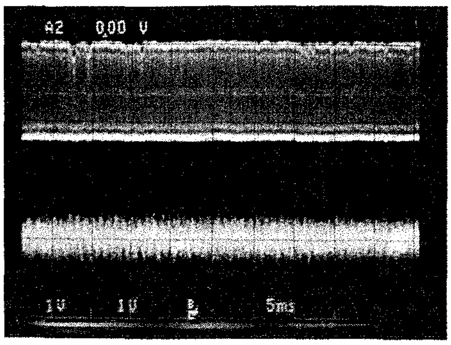
③ TP1
RF signal

TP2
F.E signal



④ TP1
RF signal

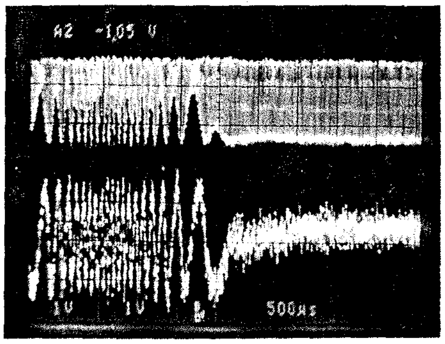
TP3
T.E signal



SEARCH time

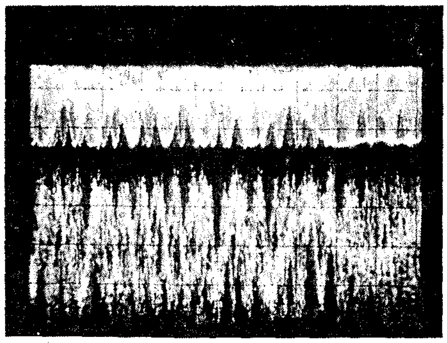
⑤ TP1
RF signal

TP3
T.E signal

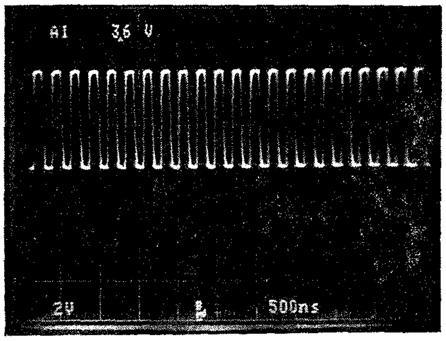


⑥ TP1
RF signal

TP3
T.E signal
(Minimum gain
of Tracking
gain)



⑦ TP12
PLCK

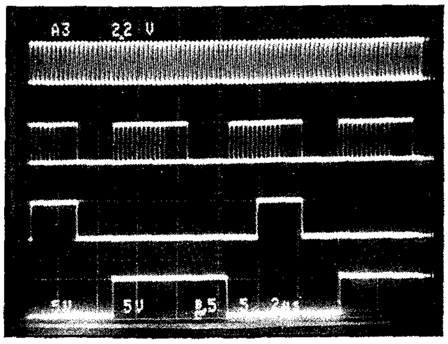


⑧ IC501-9
BLCK

IC501-8
DATA

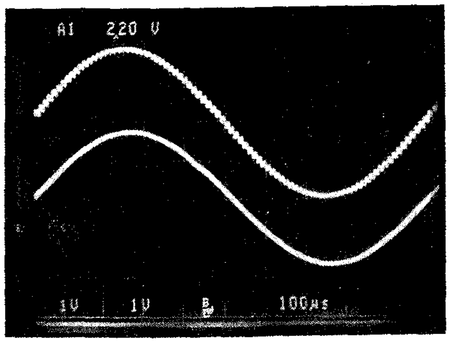
IC501-7
WCLK1

IC501-6
LRCK

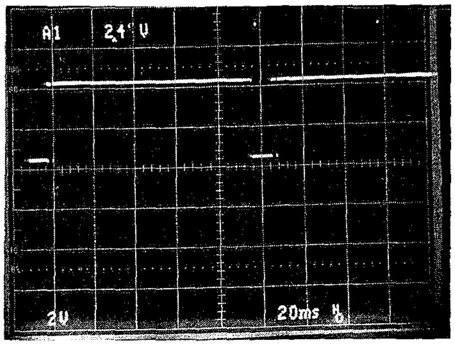


⑨ TP501
LPF IN

LPF OUT
1 kHz 0 dB
(PLAYBACK)



⑩ IC302-15
IR
(Pushing a
remotocontrol
key.)



ADJUSTMENT OF DECK & TORQUE

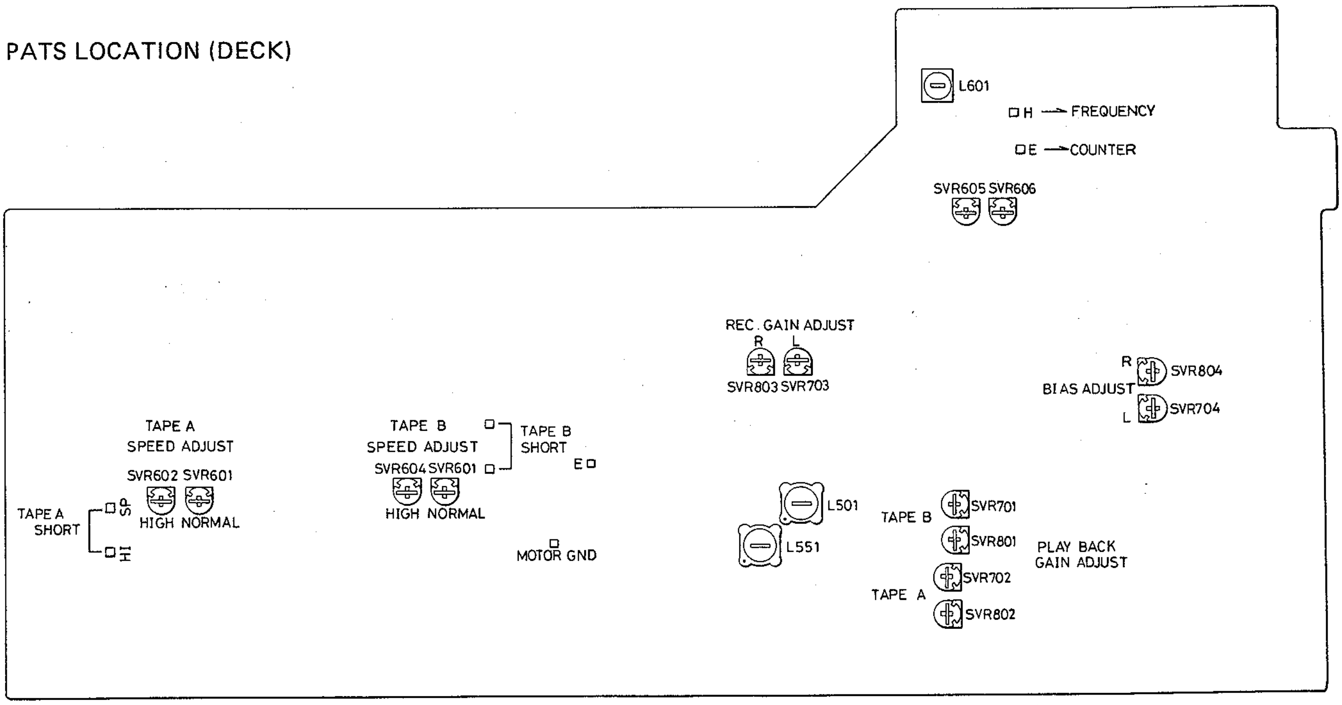
- Beat cancel switch to "1" position when adjustment and measurement and confirm "2" position of item Rec/Play Frequency quality.
- Set the Dolby switch to "OFF" position and measurement of output point to "DAT/VTR OUT" terminal position.

Amplifier Adjustment

	Item	Deck	Test Tape	Input	Adjust Point	Remarks
1	Head Azimuth	TAPE A TAPE B	VTT-738	—	Azimuth screw	Adjustment to obtain maximum. right and left balanced output (using a dual-phenomenon oscilloscope)
2	Playback Level	TAPE A	TCC-130 200mW/m	—	SVR702 SVR802	Adjust to obtain 520mV output on VTVM.
		TAPE B			SVR701 SVR801	
3	Rec/Play Level	TAPE B	AC-224	BS IN 1KHz, 380mV	SVR703 SVR803	Adjust to obtain 380mV output on VTVM.
	Rec/Play Frequency	TAPE B	AC-224 (NORMAL)	BS IN 1KHz/10KHz 38mV	SVR704 SVR804	Adjust to obtain same output of 1KHz and 10KHz.
			AC-513 (CrO2)		SVR605	
			AC-712 (METAL)		SVR606	

Note: TAPE A ····· DECK 1, TAPE B ····· DECK 2.
: Output ..... DAT REC OUT

PATS LOCATION (DECK)


L601
H → FREQUENCY
E → COUNTER
SVR605 SVR606
REC. GAIN ADJUST
R L
SVR803 SVR703
R SVR804
BIAS ADJUST
L SVR704
TAPE A
SPEED ADJUST
SVR602 SVR601
HIGH NORMAL
TAPE A
SHORT
SP
HI
TAPE B
SPEED ADJUST
SVR604 SVR601
HIGH NORMAL
TAPE B
SHORT
E
MOTOR GND
L501
L551
TAPE B
SVR701
SVR801
TAPE A
SVR702
SVR802
PLAY BACK
GAIN ADJUST

Tape Speed Adjustment

- Prepare the 2 kind test tape (Normal: MTT-111 or equality parts. (3000 Hz)
  High: TCW-211 or equality parts. (1500Hz)
- Adjustment should be made at the ending portion of the tape.
- High speed adjustment should be made before doing normal speed adjustment. When high speed adjustment is made again, normal speed adjustment must also be made.
- For high speed adjustment, plug the short-plug to the jumper leads shown in the parts location.

Step	Speed	Deck	Test Tape	SVR	Tape Counter
1	High	TAPE A	TCW-211 (1500Hz)	SVR602	3000Hz ± 10%
2		TAPE B		SVR604	
3	Normal	TAPE A	MTT-111 (3000Hz)	SVR601	3000Hz ± 5Hz
4		TAPE B		SVR603	

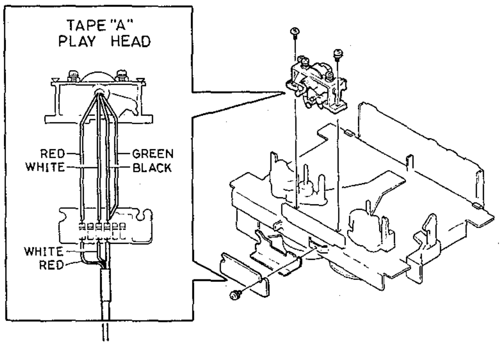
Torque Measurements

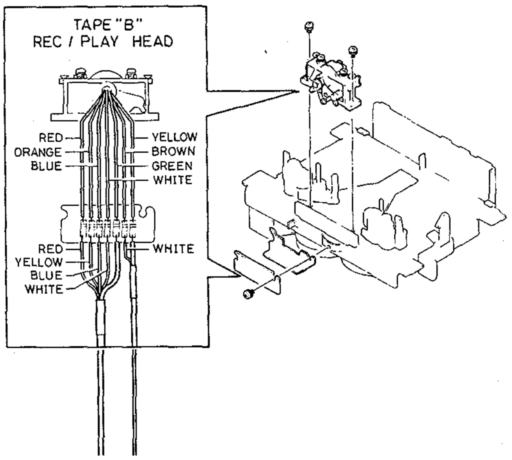
Note: Prior to measurements, clean the head, capstan and pinch roller.

Item	Take-up torque	Back tension	Pulley tension
Test cassette	PLAY: TW-2111A (FWD) PLAY: TW-2121A (REW) F•FWD/REW: TW-2231	PLAY: TW-2111A (FWD) PLAY: TW-2121A (REV)	Driving power cassette TW-2412 (FWD) TW-2422 (REV)
PLAY	30 ~ 60 gr•cm	2.0 ~ 5.0 gr•cm	> 80 gr
F•FWD	55 ~ 140 gr•cm	—	
REW	55 ~ 140 gr•cm	—	

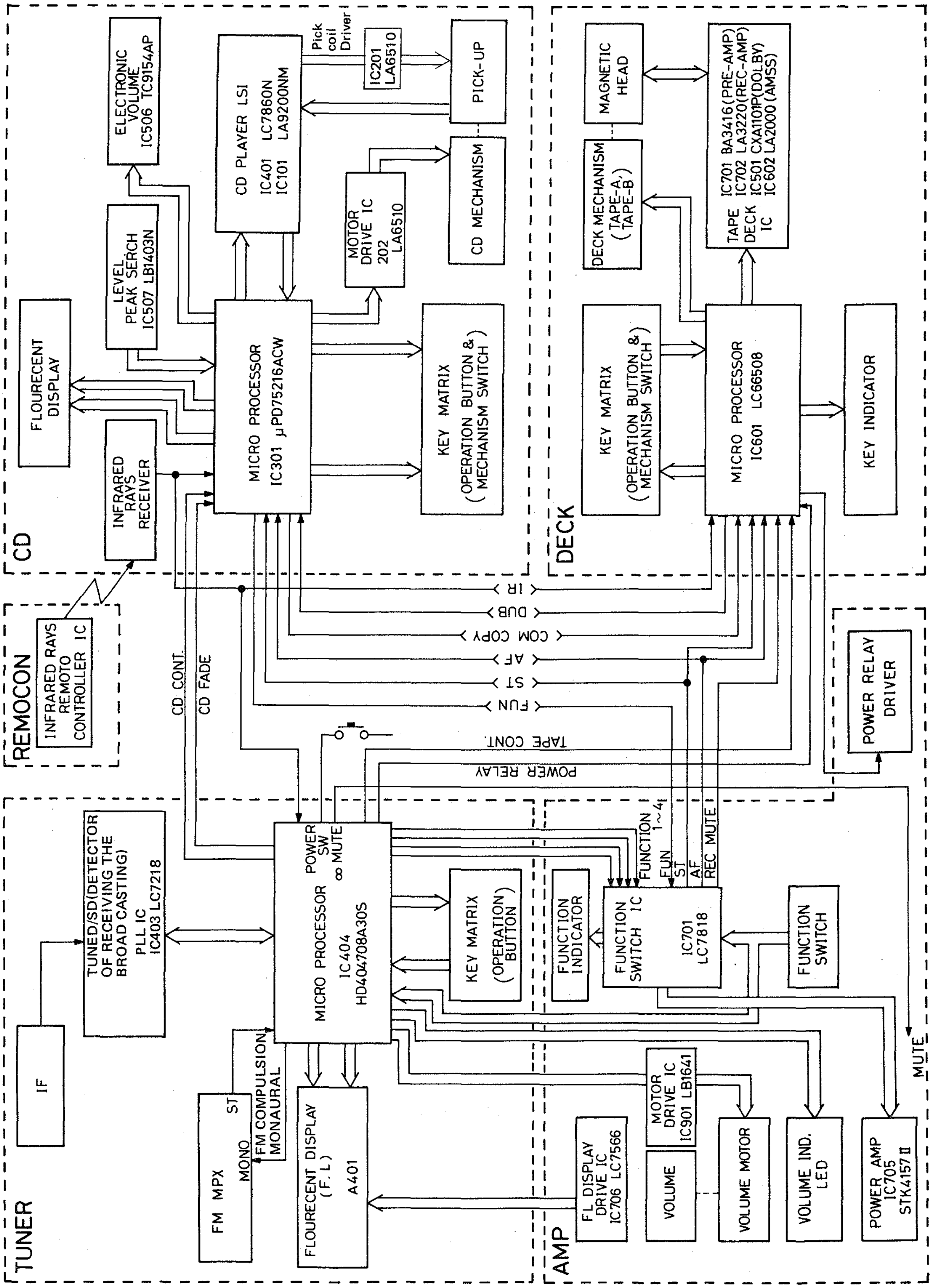
HEAD REPLACEMENT

- After replacing the head, demagnetize the head by using a head eraser.
- Be sure to clean the head assembly before making the adjustment.


TAPE "A"
PLAY HEAD
RED
WHITE
GREEN
BLACK
WHITE
RED

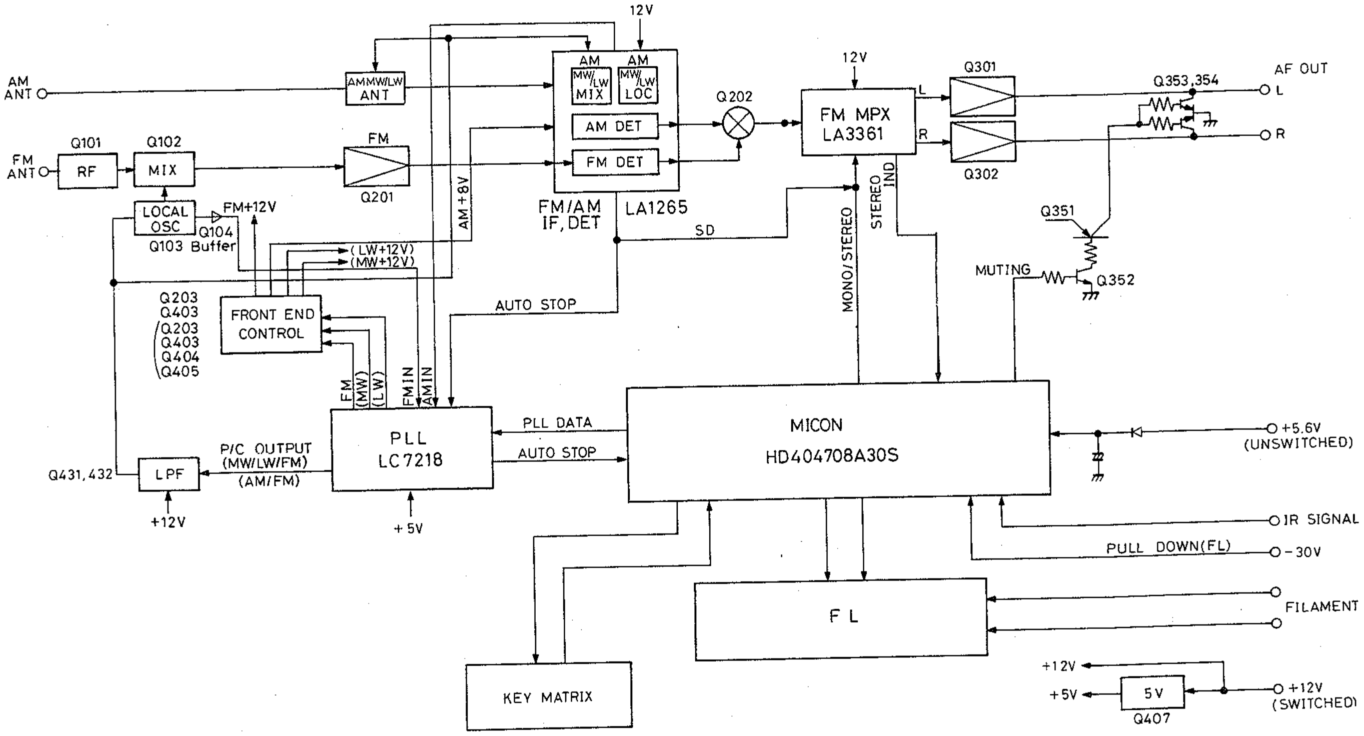

TAPE "B"
REC / PLAY HEAD
RED
ORANGE
BLUE
YELLOW
BROWN
GREEN
WHITE
RED
YELLOW
BLUE
WHITE
WHITE

BLOCK DIAGRAM (UNIT)

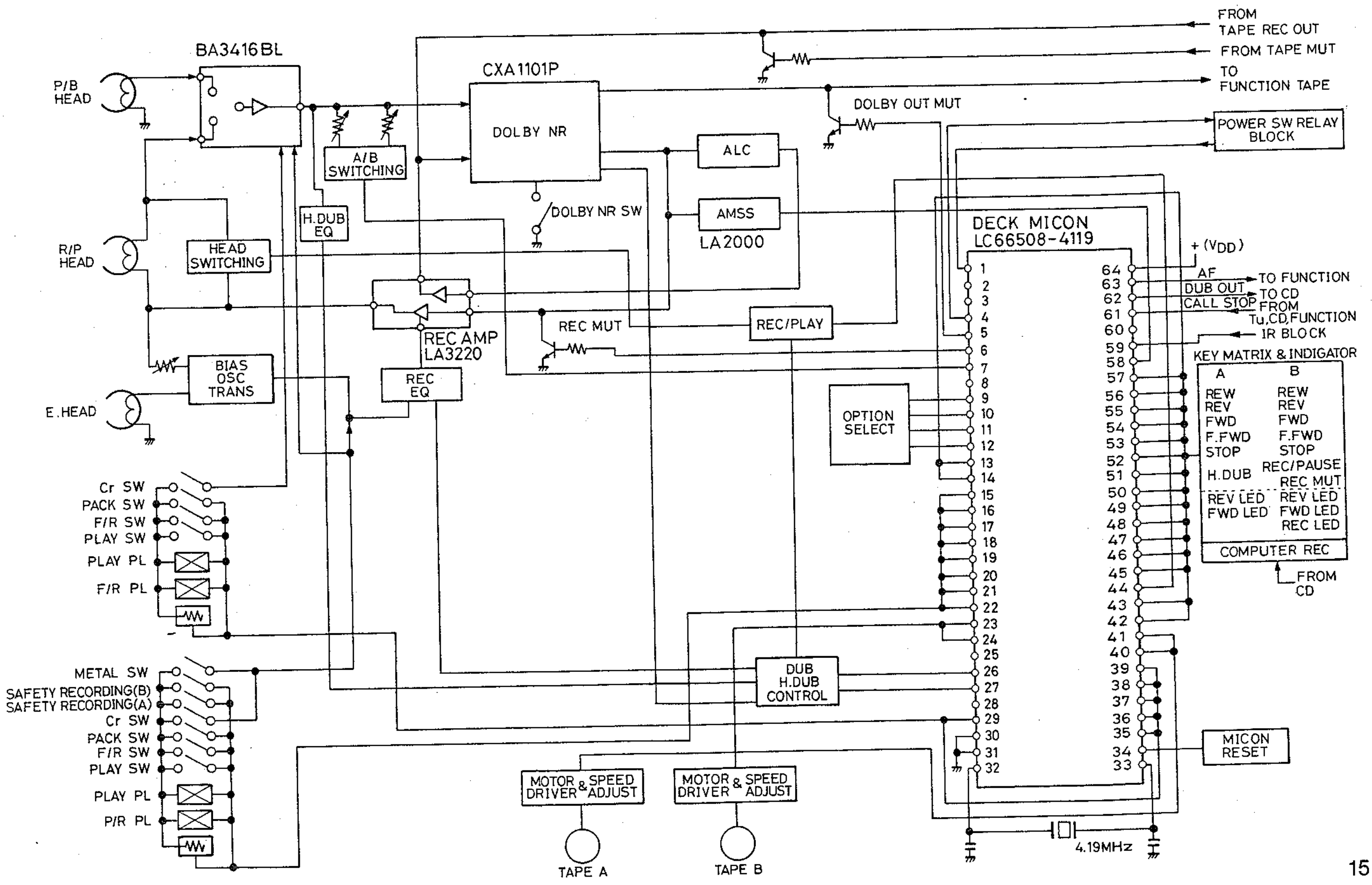

CD
ELECTRONIC VOLUME IC506 TC9154AP
LEVEL PEAK SERCH IC507 LB1403N
FLOURECENT DISPLAY
INFRARED RAYS RECEIVER
CD PLAYER LSI IC401 LC7860N IC101 LA9200NM
Pick coil Driver
IC201 LA6510
PICK-UP
MOTOR DRIVE IC 202 LA6510
CD MECHANISM
MICRO PROCESSOR IC301 μPD75216ACW
KEY MATRIX (OPERATION BUTTON & MECHANISM SWITCH)
DECK
MAGNETIC HEAD
DECK MECHANISM (TAPE-A, TAPE-B)
TAPE DECK IC IC701 BA3416(PRE-AMP) IC702 LA3220(REC-AMP) IC501 CXA1101P(DOLBY) IC602 LA2000(AMSS)
KEY MATRIX (OPERATION BUTTON & MECHANISM SWITCH)
MICRO PROCESSOR IC601 LC66508
KEY INDICATOR
REMOCON
INFRARED RAYS REMOTO CONTROLLER IC
IR
DUB
COM COPY
AF
ST
FUN
CD CONT.
CD FADE
TAPE CONT.
POWER RELAY
POWER RELAY DRIVER
TUNER
IF
TUNED/SD(DETECTOR OF RECEIVING THE BROAD CASTING) PLL IC IC403 LC7218
MICRO PROCESSOR IC404 HD404708A30S
POWER SW
∞ MUTE
KEY MATRIX (OPERATION BUTTON)
FM MPX
ST
MONO
FM COMPULSION MONAURAL
FLOURECENT DISPLAY (F.L) A401
AMP
FUNCTION 1~4
FUN
ST
AF
REC MUTE
FUNCTION INDICATOR
FUNCTION SWITCH IC IC701 LC7818
FUNCTION SWITCH
MOTOR DRIVE IC IC901 LB1641
FL DISPLAY DRIVE IC IC706 LC7566
VOLUME
VOLUME MOTOR
VOLUME IND. LED
POWER AMP IC705 STK4157II
MUTE

BLOCK DIAGRAM

< TUNER SECTION >


12V
AM ANT
AMMW/LW ANT
AM MW/LW MIX
AM MW/LW LOC
AM DET
FM DET
FM/AM IF, DET
LA1265
Q202
12V
FM MPX
LA3361
L
R
Q301
Q302
Q353,354
AF OUT
L
R
FM ANT
Q101
RF
Q102
MIX
FM
Q201
AM +8V
LOCAL OSC
FM+12V
Q104
Q103 Buffer
(LW+12V)
(MW+12V)
SD
MONO/STEREO
STEREO IND
Q351
MUTING
Q352
Q203
Q403
Q203
Q403
Q404
Q405
FRONT END CONTROL
AUTO STOP
FM
(MW)
(LW)
FMIN
AMIN
PLL LC7218
PLL DATA
AUTO STOP
MICON
HD404708A30S
+5.6V (UNSWITCHED)
P/C OUTPUT (MW/LW/FM) (AM/FM)
Q431,432
LPF
+12V
+5V
IR SIGNAL
PULL DOWN(FL)
-30V
F L
FILAMENT
KEY MATRIX
+12V
+5V
5V
Q407
+12V (SWITCHED)

< DECK SECTION >


BA3416BL
P/B HEAD
R/P HEAD
E.HEAD
A/B SWITCHING
H.DUB EQ
HEAD SWITCHING
BIAS OSC TRANS
CXA1101P
DOLBY NR
DOLBY NR SW
ALC
AMSS
LA2000
REC AMP LA3220
REC EQ
REC MUT
REC/PLAY
DOLBY OUT MUT
FROM TAPE REC OUT
FROM TAPE MUT
TO FUNCTION TAPE
POWER SW RELAY BLOCK
DECK MICON
LC66508-4119
+(VDD)
AF
TO FUNCTION
DUB OUT
TO CD
CALL STOP
FROM Tu,CD,FUNCTION
IR BLOCK
KEY MATRIX & INDIGATOR
A
B
REW
REV
FWD
F.FWD
STOP
H.DUB
REW
REV
FWD
F.FWD
STOP
REC/PAUSE
REC MUT
REV LED
FWD LED
REV LED
FWD LED
REC LED
COMPUTER REC
FROM CD
OPTION SELECT
Cr SW
PACK SW
F/R SW
PLAY SW
PLAY PL
F/R PL
METAL SW
SAFETY RECORDING(B)
SAFETY RECORDING(A)
Cr SW
PACK SW
F/R SW
PLAY SW
PLAY PL
P/R PL
DUB H.DUB CONTROL
MOTOR DRIVER & SPEED ADJUST
MOTOR DRIVER & SPEED ADJUST
TAPE A
TAPE B
MICON RESET
4.19MHz
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
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64
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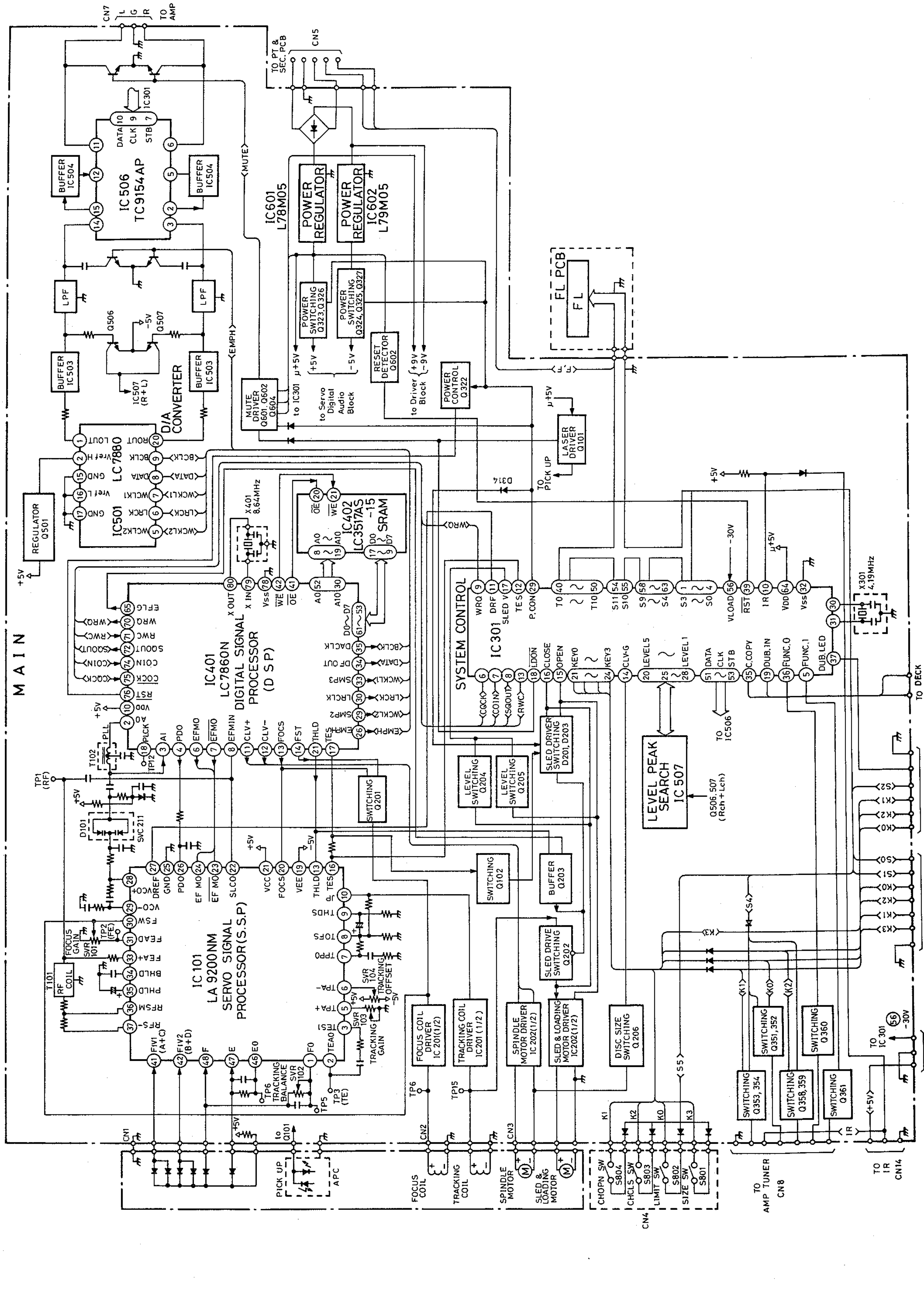
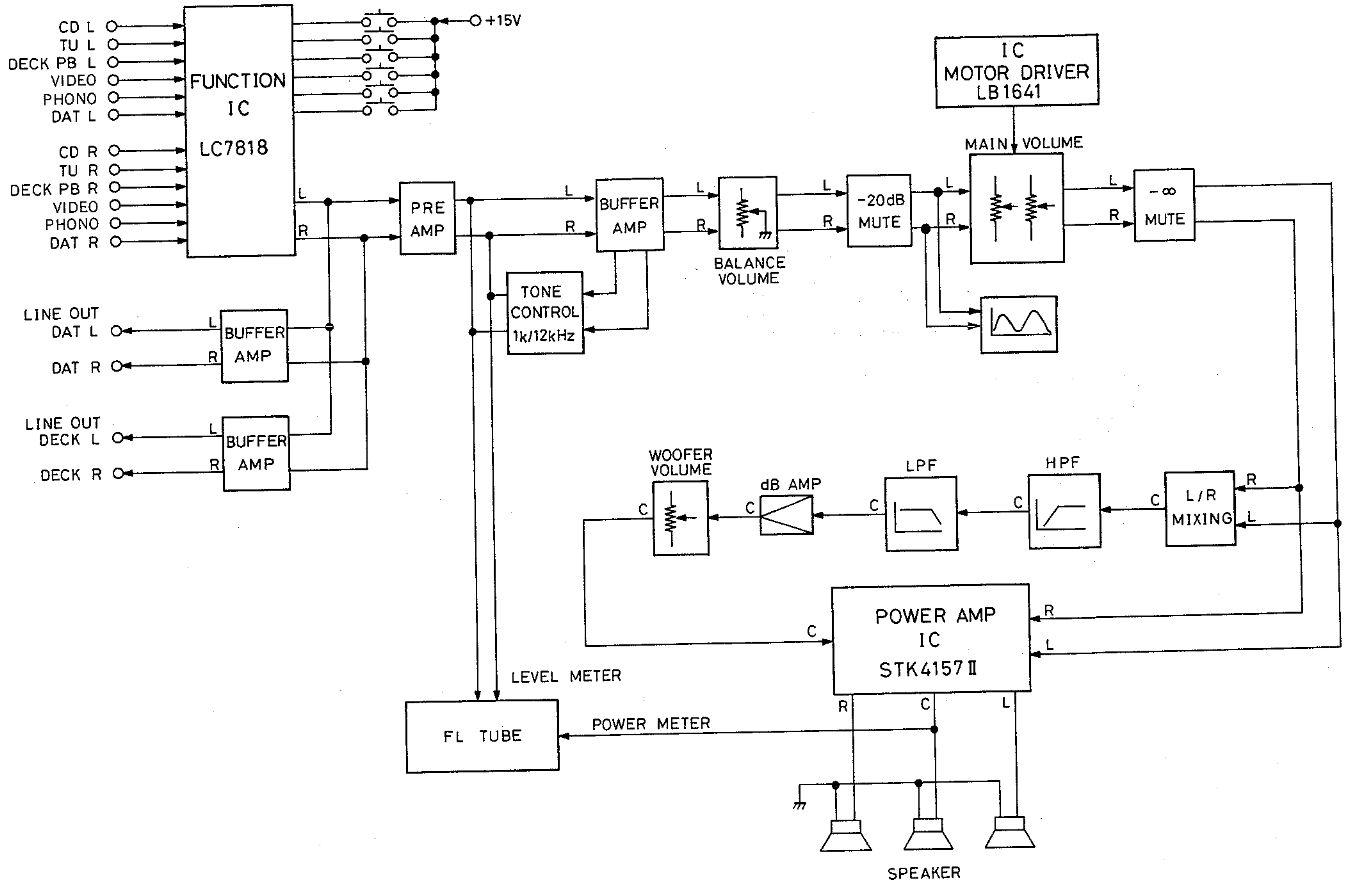
34
33

< CD SECTION >


MAIN
CN7 L G R TO AMP
TO PT & SEC. PCB
CN5
IC506 TC9154AP
BUFFER IC504
BUFFER IC503
LPF
Q506
Q507
IC507 (R+L)
D/A CONVERTER
IC501 LC7880
REGULATOR Q501
+5V
<MUTE>
<EMPH>
IC601 L78M05 POWER REGULATOR
IC602 L79M05 POWER REGULATOR
POWER SWITCHING Q323,Q326
POWER SWITCHING Q324,Q325,Q327
RESET DETECTOR Q602
MUTE DRIVER Q601,Q602 Q604
to IC301
to Servo Digital Audio Block
to Driver Block +9V -9V
POWER CONTROL Q322
LASER DRIVER Q101
TO PICK UP
FL PCB
FL
X401 8.64MHz
IC402 LC3517AS -15 SRAM
IC401 LC7860N DIGITAL SIGNAL PROCESSOR (D S P)
SYSTEM CONTROL IC301
X301 4.19MHz
LEVEL PEAK SEARCH IC 507
Q506,507 (Rch+Lch)
TO IC506
LEVEL SWITCHING Q204
LEVEL SWITCHING Q205
SLED DRIVER SWITCHING D201,D203
SWITCHING Q201
SWITCHING Q102
BUFFER Q203
SLED DRIVE SWITCHING Q202
IC101 LA9200NM SERVO SIGNAL PROCESSOR (S.S.P)
T101 RF COIL
T102 PLL
D101 SVC211
TP1 (RF)
TP2 (FE)
FOCUS GAIN SVR 101
TRACKING BALANCE SVR 102
TRACKING OFFSET SVR 104
TRACKING GAIN SVR 103
TP3 (TE)
TP5
TP6
TP12
TP15
FOCUS COIL DRIVER IC201(1/2)
TRACKING COIL DRIVER IC201(1/2)
SPINDLE MOTOR DRIVER IC202(1/2)
SLED & LOADING MOTOR DRIVER IC202(1/2)
DISC SIZE SWITCHING Q206
SWITCHING Q351,352
SWITCHING Q360
SWITCHING Q353,354
SWITCHING Q358,359
SWITCHING Q361
TO IC301 56 -30V
TO SUB P.T. CN6
TO DECK CN13
TO SW2 CN8
TO SW1 CN9
TO IR CN14
TO AMP TUNER CN8
CN1
CN2
CN3
CN4
PICK UP
APC
FOCUS COIL
TRACKING COIL
SPINDLE MOTOR
SLED & LOADING MOTOR
CHOPN SW S804
CHCLS SW S803
LIMIT SW S802
SIZE SW S801
K1 K2 K0 K3

<AMP SECTION>

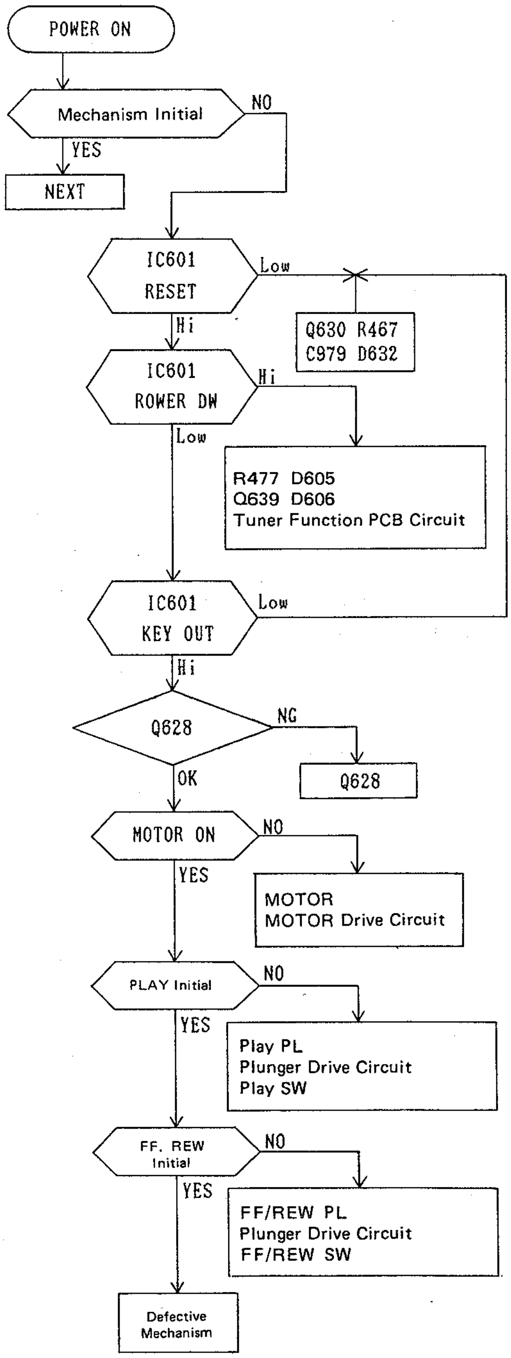

CD L
TU L
DECK PB L
VIDEO
PHONO
DAT L
CD R
TU R
DECK PB R
VIDEO
PHONO
DAT R
FUNCTION
IC
LC7818
+15V
L
R
LINE OUT
DAT L
DAT R
BUFFER
AMP
LINE OUT
DECK L
DECK R
BUFFER
AMP
PRE
AMP
BUFFER
AMP
TONE
CONTROL
1k/12kHz
BALANCE
VOLUME
-20dB
MUTE
IC
MOTOR DRIVER
LB1641
MAIN VOLUME
-∞
MUTE
WOOFER
VOLUME
dB AMP
LPF
HPF
L/R
MIXING
C
POWER AMP
IC
STK4157 II
LEVEL METER
FL TUBE
POWER METER
SPEAKER

MICON FLOW CHART

Describe the 3 Block (Deck, CD, Tuner) in order action of microprocessor.

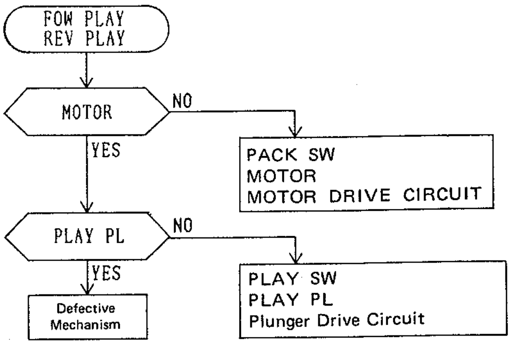
1. Deck section (IC601 ... LC66508)

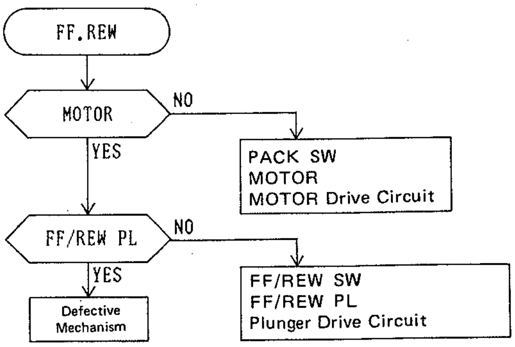
(1) Power "ON"


POWER ON
Mechanism Initial
NO
YES
NEXT
IC601 RESET
Low
Hi
Q630 R467
C979 D632
IC601 ROWER DW
Hi
Low
R477 D605
Q639 D606
Tuner Function PCB Circuit
IC601 KEY OUT
Low
Hi
Q628
NG
OK
Q628
MOTOR ON
NO
YES
MOTOR
MOTOR Drive Circuit
PLAY Initial
NO
YES
Play PL
Plunger Drive Circuit
Play SW
FF. REW Initial
NO
YES
FF/REW PL
Plunger Drive Circuit
FF/REW SW
Defective Mechanism

PLAY.FF.REW Initial signal resets PLAY.FF.REW mode of the mechanism before Power ON.

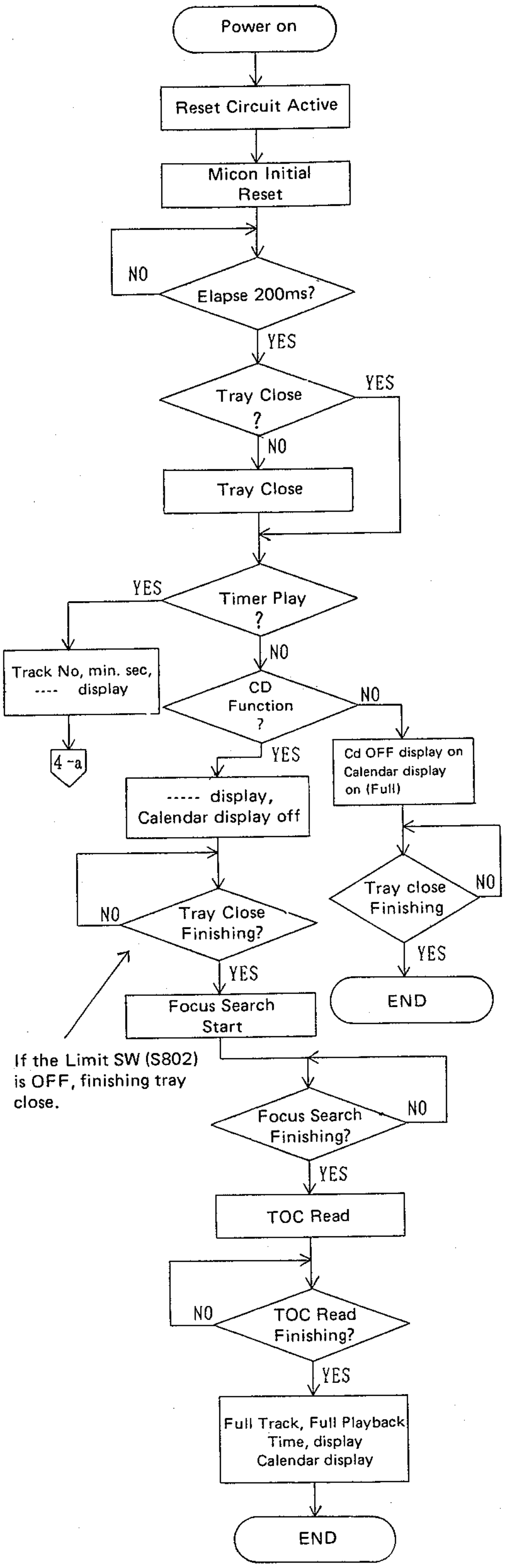
(2) Forward, Reverse Play


FOW PLAY
REV PLAY
MOTOR
NO
YES
PACK SW
MOTOR
MOTOR DRIVE CIRCUIT
PLAY PL
NO
YES
PLAY SW
PLAY PL
Plunger Drive Circuit
Defective Mechanism


FF.REW
MOTOR
NO
YES
PACK SW
MOTOR
MOTOR Drive Circuit
FF/REW PL
NO
YES
FF/REW SW
FF/REW PL
Plunger Drive Circuit
Defective Mechanism

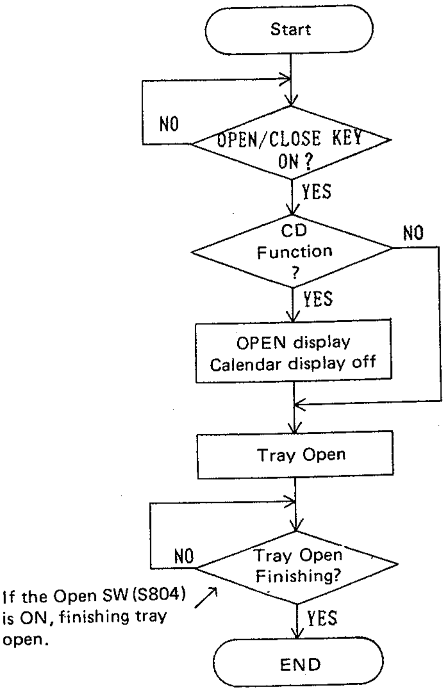
2. CD section (IC301 ...... μPD75216ACW)

(1) Power "ON"


Power on
Reset Circuit Active
Micon Initial Reset
NO
Elapse 200ms?
YES
Tray Close ?
YES
NO
Tray Close
YES
Timer Play ?
NO
Track No, min. sec, ---- display
4-a
CD Function ?
NO
YES
----- display, Calendar display off
Cd OFF display on Calendar display on (Full)
NO
Tray Close Finishing?
Tray close Finishing
NO
YES
YES
Focus Search Start
END
Focus Search Finishing?
NO
YES
TOC Read
NO
TOC Read Finishing?
YES
Full Track, Full Playback Time, display Calendar display
END

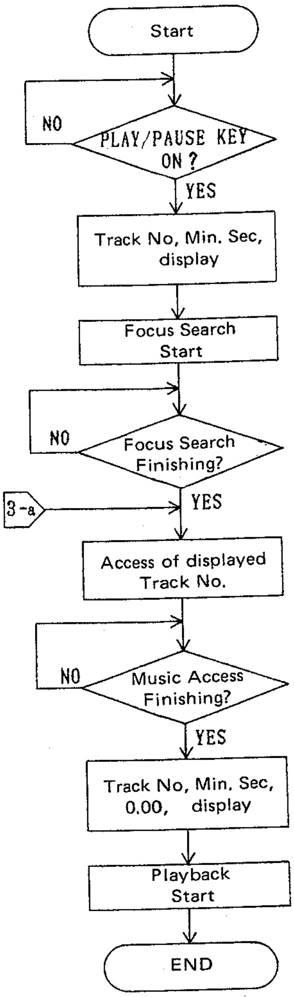
If the Limit SW (S802) is OFF, finishing tray close.

(2) Tray "OPEN" from STOP

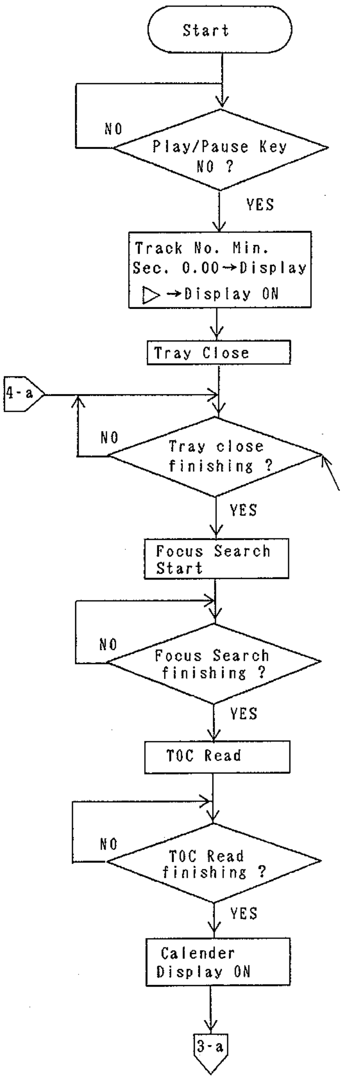

Start
NO
OPEN/CLOSE KEY ON ?
YES
CD Function ?
NO
YES
OPEN display Calendar display off
Tray Open
NO
Tray Open Finishing?
YES
END

If the Open SW (S804) is ON, finishing tray open.

(3) PLAY from STOP

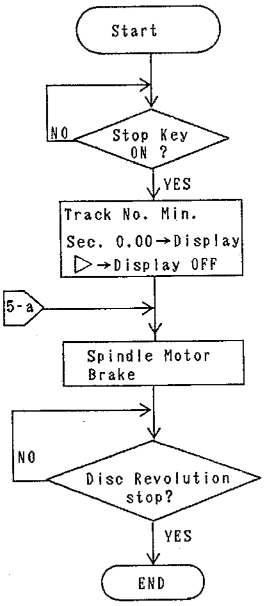

Start
NO
PLAY/PAUSE KEY ON ?
YES
Track No, Min. Sec, display
Focus Search Start
NO
Focus Search Finishing?
3-a
YES
Access of displayed Track No.
NO
Music Access Finishing?
YES
Track No, Min. Sec, 0.00, display
Playback Start
END

(4) PLAY from Tray "OPEN"

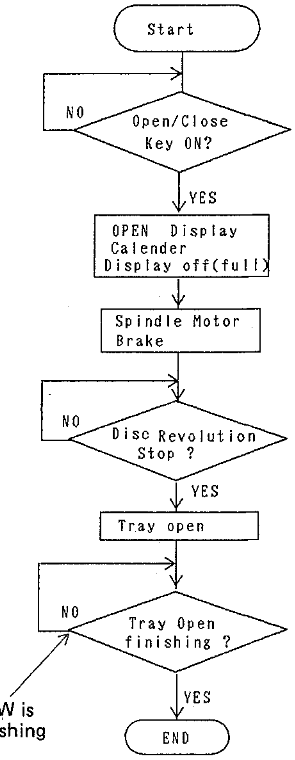

Start
NO
Play/Pause Key NO ?
YES
Track No. Min. Sec. 0.00→Display
▷→Display ON
Tray Close
4-a
NO
Tray close finishing ?
YES
Focus Search Start
NO
Focus Search finishing ?
YES
TOC Read
NO
TOC Read finishing ?
YES
Calender Display ON
3-a

When Limit SW is OFF, close finishing

(5) STOP from PLAY

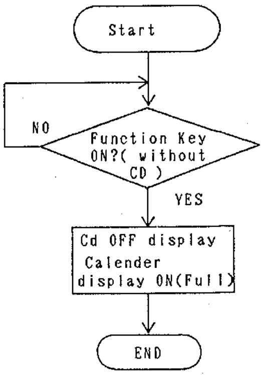

Start
NO
Stop Key ON ?
YES
Track No. Min. Sec. 0.00→Display
▷→Display OFF
5-a
Spindle Motor Brake
NO
Disc Revolution stop?
YES
END

(6) Tray "OPEN" from PLAY

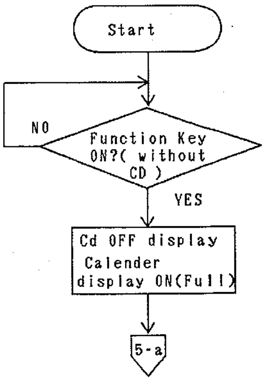

Start
NO
Open/Close Key ON?
YES
OPEN Display Calender Display off(full)
Spindle Motor Brake
NO
Disc Revolution Stop ?
YES
Tray open
NO
Tray Open finishing ?
YES
END

When Open SW is ON, open finishing

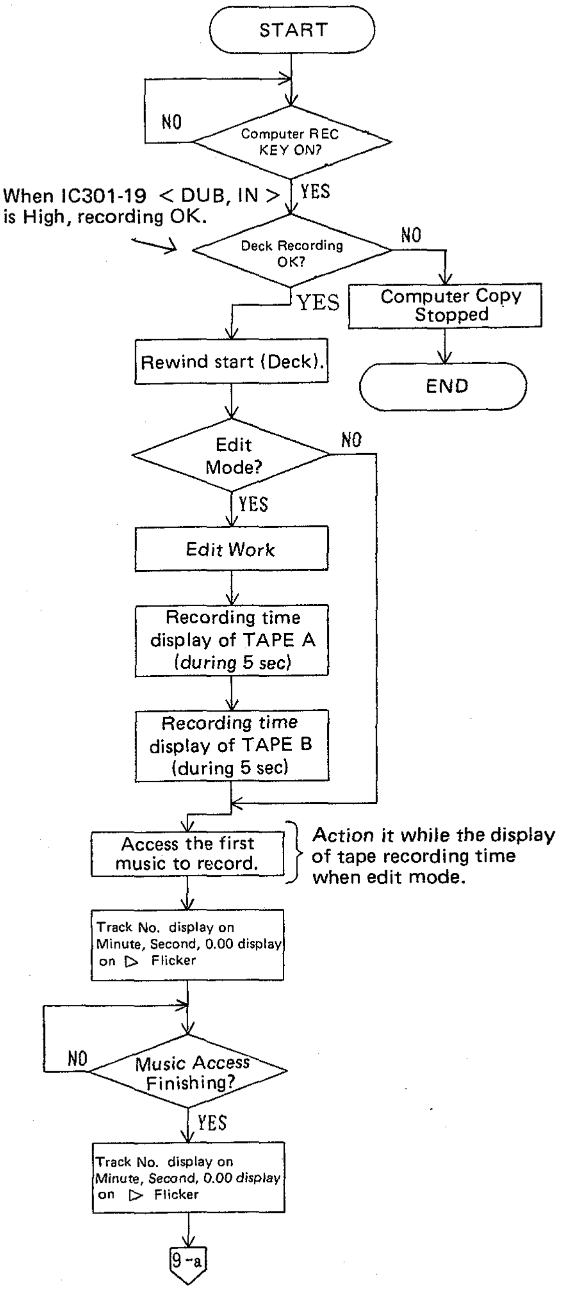
(7) Other Function from CD Function (at STOP)

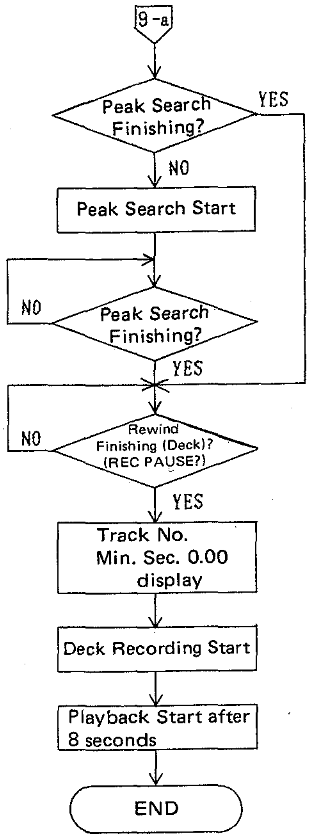

Start
NO
Function Key ON?(without CD)
YES
Cd OFF display Calender display ON(Full)
END

(8) Other Function from CD Function (at PLAY)


Start
NO
Function Key ON?(without CD)
YES
Cd OFF display Calender display ON(Full)
5-a

(9) Computer Copy

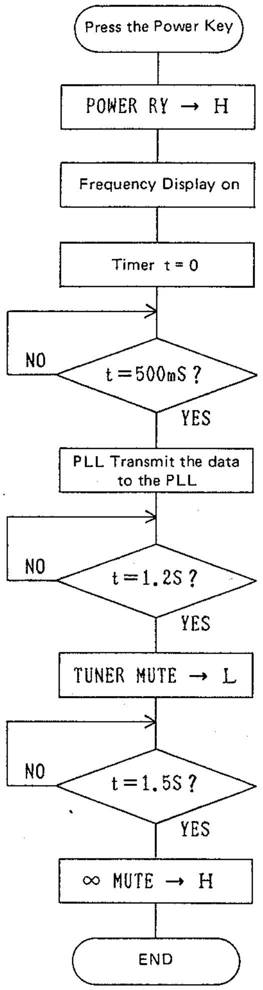

START
NO
Computer REC KEY ON?
YES
When IC301-19 < DUB, IN > is High, recording OK.
Deck Recording OK?
NO
Computer Copy Stopped
END
YES
Rewind start (Deck).
Edit Mode?
NO
YES
Edit Work
Recording time display of TAPE A (during 5 sec)
Recording time display of TAPE B (during 5 sec)
Access the first music to record.
Action it while the display of tape recording time when edit mode.
Track No. display on Minute, Second, 0.00 display on ▷ Flicker
NO
Music Access Finishing?
YES
Track No. display on Minute, Second, 0.00 display on ▷ Flicker
9-a


9-a
Peak Search Finishing?
YES
NO
Peak Search Start
NO
Peak Search Finishing?
YES
NO
Rewind Finishing (Deck)? (REC PAUSE?)
YES
Track No. Min. Sec. 0.00 display
Deck Recording Start
Playback Start after 8 seconds
END

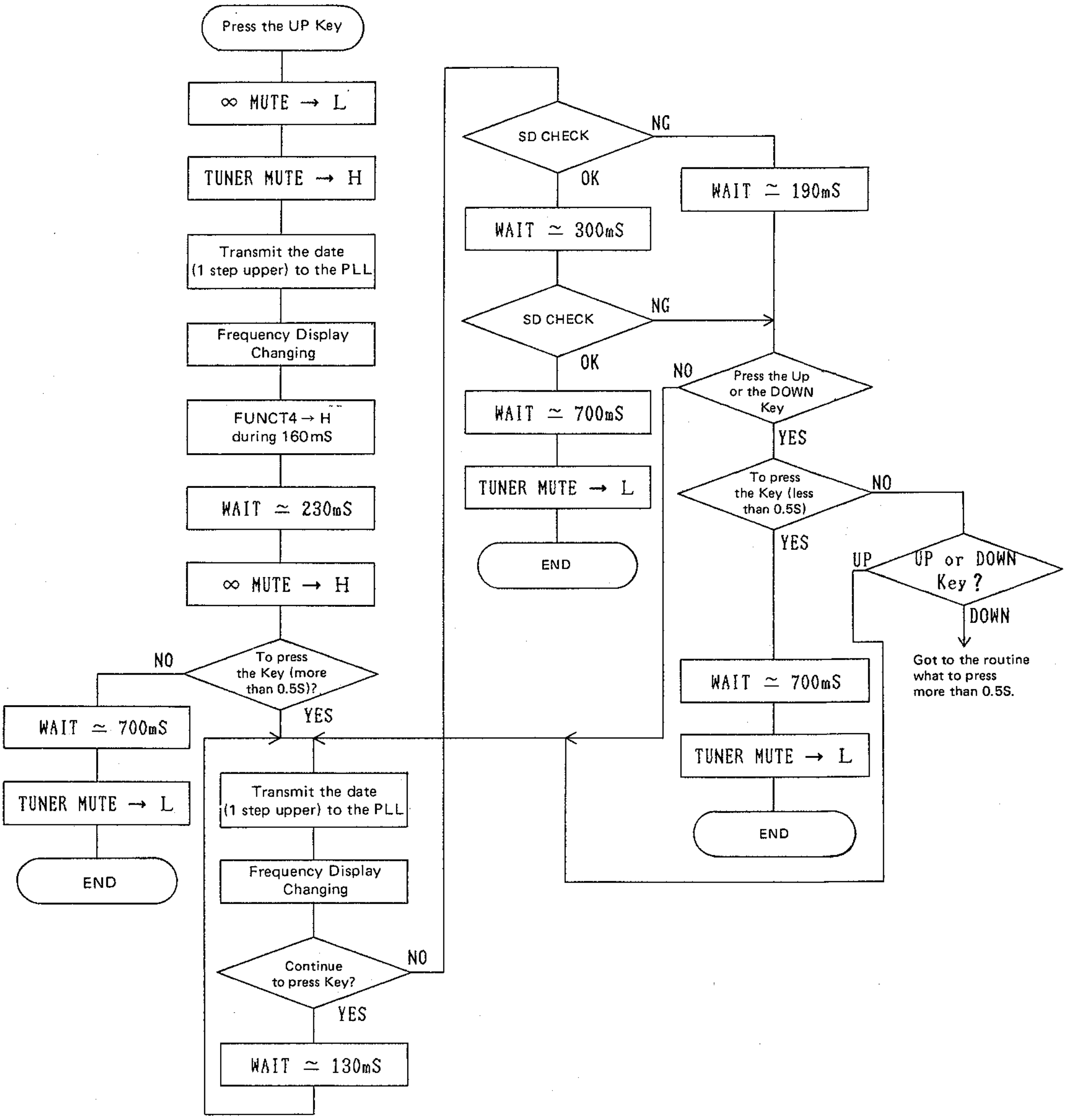
To be enable computer copy key only in
CD function STOP mode.
Deck is become PAUSE mode after
Rewind finishing.
In Edit mode, be selected TAPE.

3. Tuner section (IC404 ... HD404708A30S)

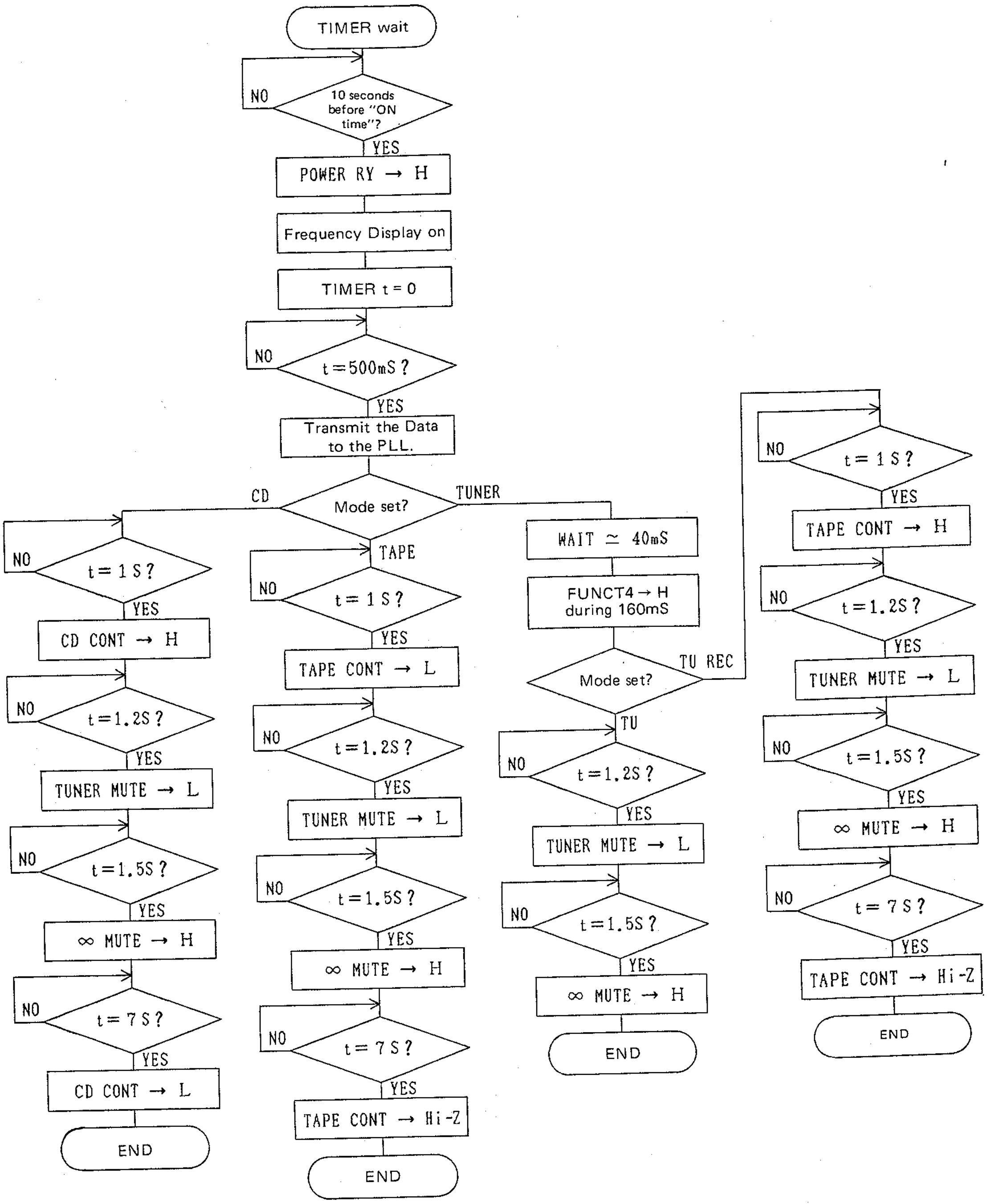
(1) Power "ON"


Press the Power Key
POWER RY → H
Frequency Display on
Timer t = 0
t=500mS ?
NO
YES
PLL Transmit the data to the PLL
t=1.2S ?
NO
YES
TUNER MUTE → L
t=1.5S ?
NO
YES
∞ MUTE → H
END

(2) Tuning (ex. upper side)

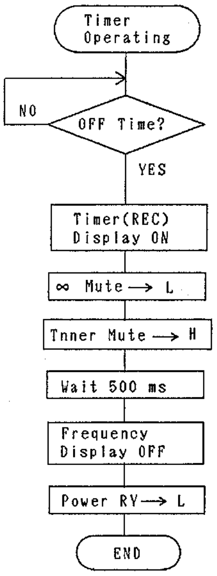

Press the UP Key
∞ MUTE → L
TUNER MUTE → H
Transmit the date (1 step upper) to the PLL
Frequency Display Changing
FUNCT4 → H during 160mS
WAIT ≃ 230mS
∞ MUTE → H
To press the Key (more than 0.5S)?
NO
YES
WAIT ≃ 700mS
TUNER MUTE → L
END
Transmit the date (1 step upper) to the PLL
Frequency Display Changing
Continue to press Key?
NO
YES
WAIT ≃ 130mS
SD CHECK
NG
OK
WAIT ≃ 300mS
SD CHECK
NG
OK
WAIT ≃ 700mS
TUNER MUTE → L
END
WAIT ≃ 190mS
Press the Up or the DOWN Key
NO
YES
To press the Key (less than 0.5S)
NO
YES
UP or DOWN Key ?
UP
DOWN
Got to the routine what to press more than 0.5S.
WAIT ≃ 700mS
TUNER MUTE → L
END

(3) Power "ON" with timer

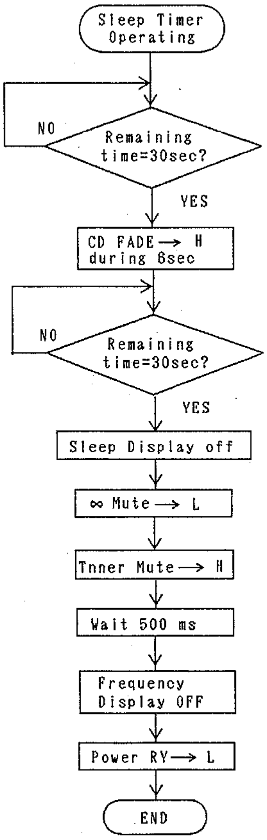


TIMER wait
NO
10 seconds before "ON time"?
YES
POWER RY → H
Frequency Display on
TIMER t = 0
NO
t = 500mS ?
YES
Transmit the Data to the PLL.
CD
Mode set?
TUNER
TAPE
NO
t = 1 S ?
YES
CD CONT → H
NO
t = 1.2S ?
YES
TUNER MUTE → L
NO
t = 1.5S ?
YES
∞ MUTE → H
NO
t = 7 S ?
YES
CD CONT → L
END
NO
t = 1 S ?
YES
TAPE CONT → L
NO
t = 1.2S ?
YES
TUNER MUTE → L
NO
t = 1.5S ?
YES
∞ MUTE → H
NO
t = 7 S ?
YES
TAPE CONT → Hi-Z
END
WAIT ≃ 40mS
FUNCT4 → H during 160mS
Mode set?
TU REC
TU
NO
t = 1.2S ?
YES
TUNER MUTE → L
NO
t = 1.5S ?
YES
∞ MUTE → H
END
NO
t = 1 S ?
YES
TAPE CONT → H
NO
t = 1.2S ?
YES
TUNER MUTE → L
NO
t = 1.5S ?
YES
∞ MUTE → H
NO
t = 7 S ?
YES
TAPE CONT → Hi-Z
END

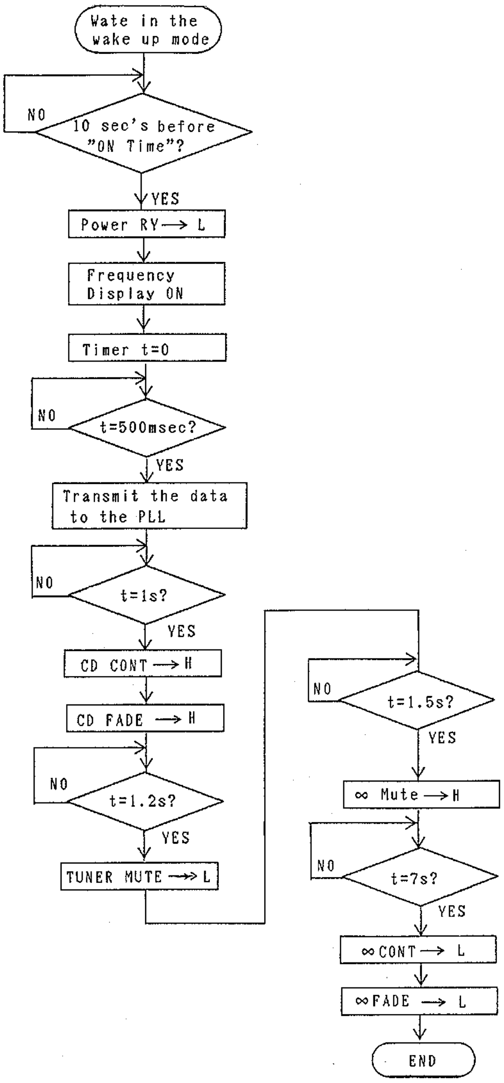
(4) Power "OFF" with timer


Timer Operating
NO
OFF Time?
YES
Timer(REC) Display ON
∞ Mute → L
Tnner Mute → H
Wait 500 ms
Frequency Display OFF
Power RY → L
END

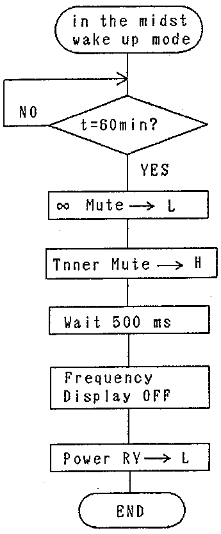
(5) Power "OFF" with sleep timer


Sleep Timer Operating
NO
Remaining time=30sec?
YES
CD FADE → H during 6sec
NO
Remaining time=30sec?
YES
Sleep Display off
∞ Mute → L
Tnner Mute → H
Wait 500 ms
Frequency Display OFF
Power RY → L
END

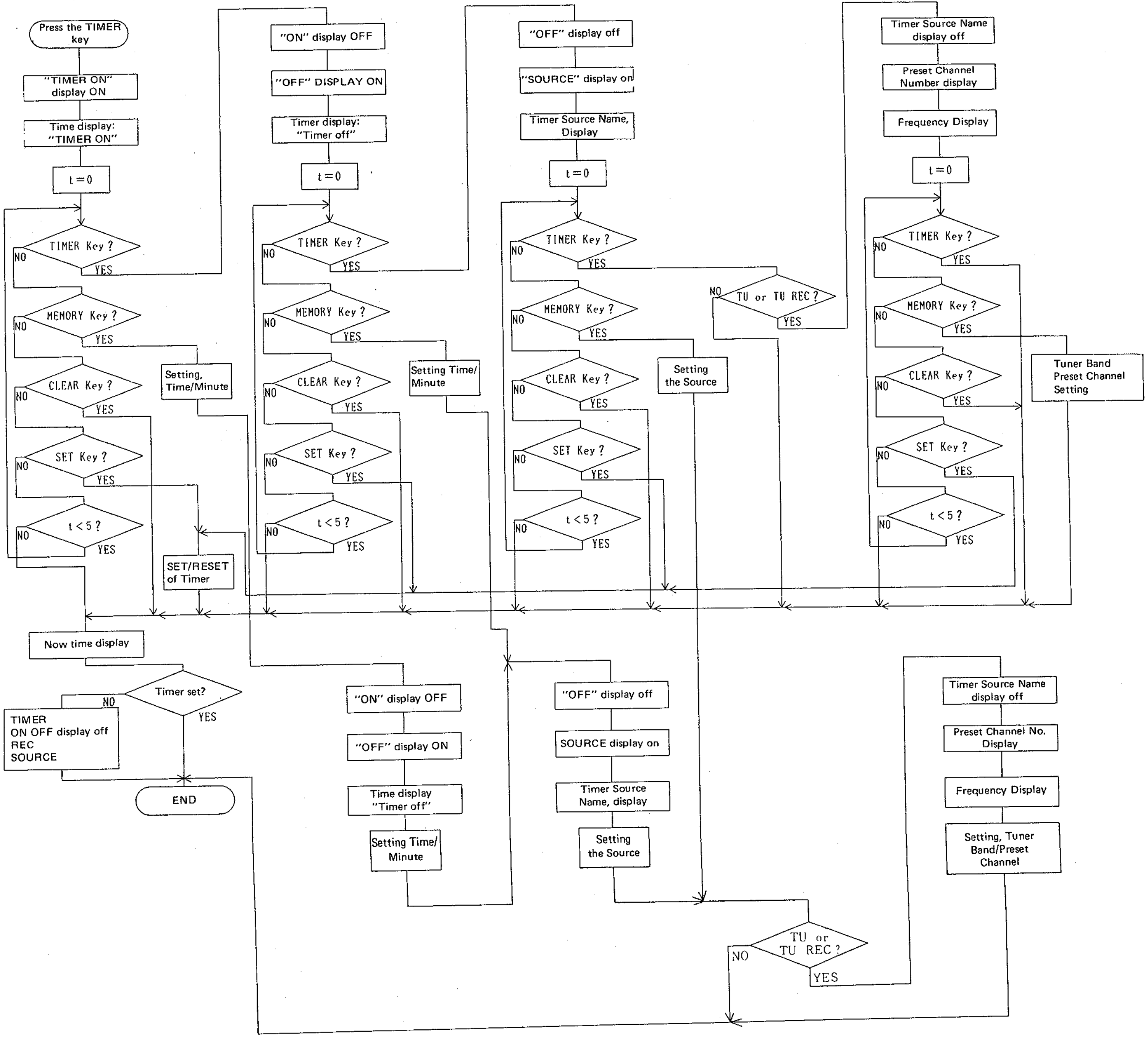
(6) CD play with wake up mode


Wate in the wake up mode
NO
10 sec's before "ON Time"?
YES
Power RY → L
Frequency Display ON
Timer t=0
NO
t=500msec?
YES
Transmit the data to the PLL
NO
t=1s?
YES
CD CONT → H
CD FADE → H
NO
t=1.2s?
YES
TUNER MUTE → L
NO
t=1.5s?
YES
∞ Mute → H
NO
t=7s?
YES
∞ CONT → L
∞ FADE → L
END

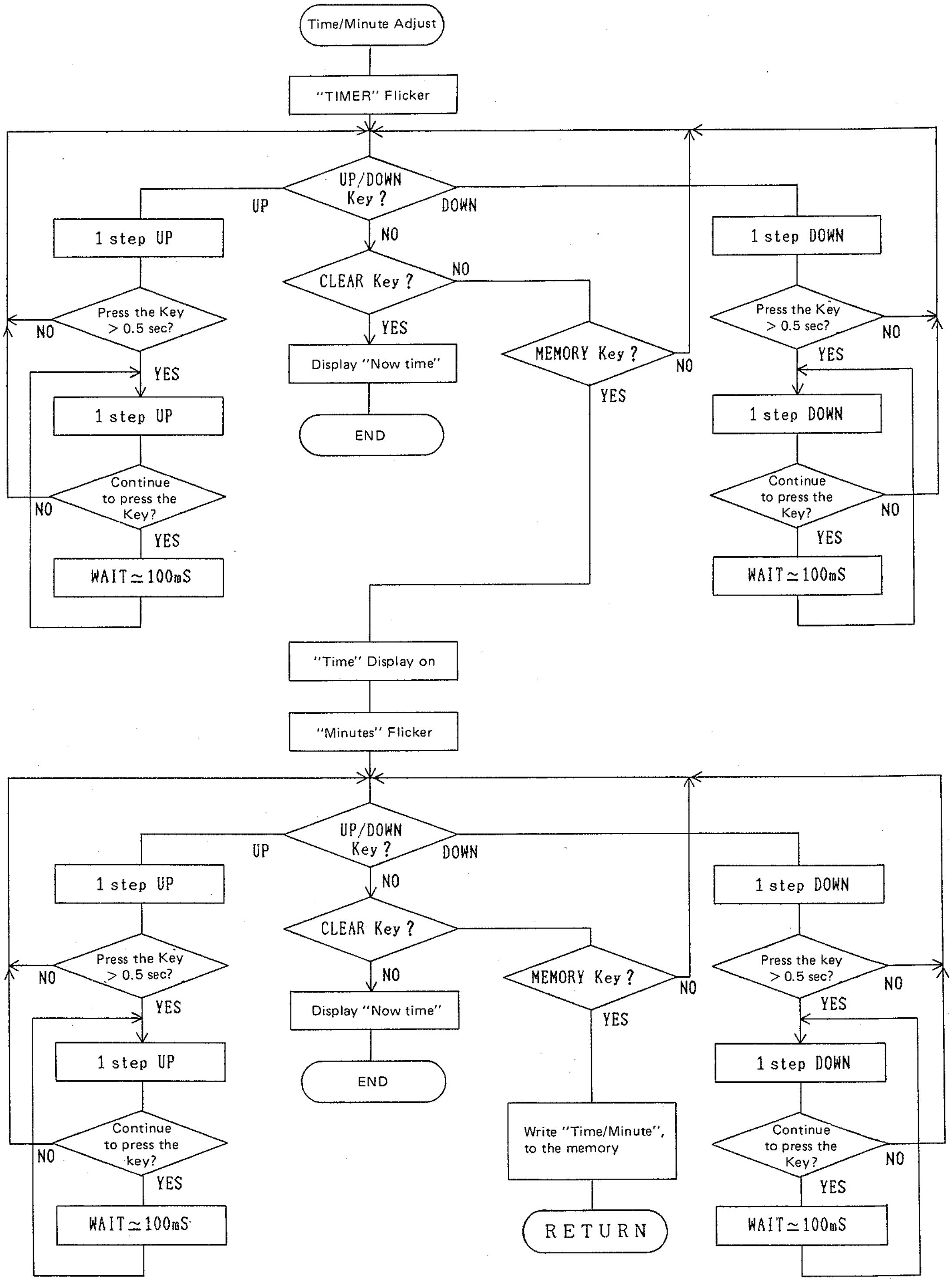
(7) Power up with wake up mode


in the midst wake up mode
NO
t=60min?
YES
∞ Mute → L
Tnner Mute → H
Wait 500 ms
Frequency Display OFF
Power RY → L
END

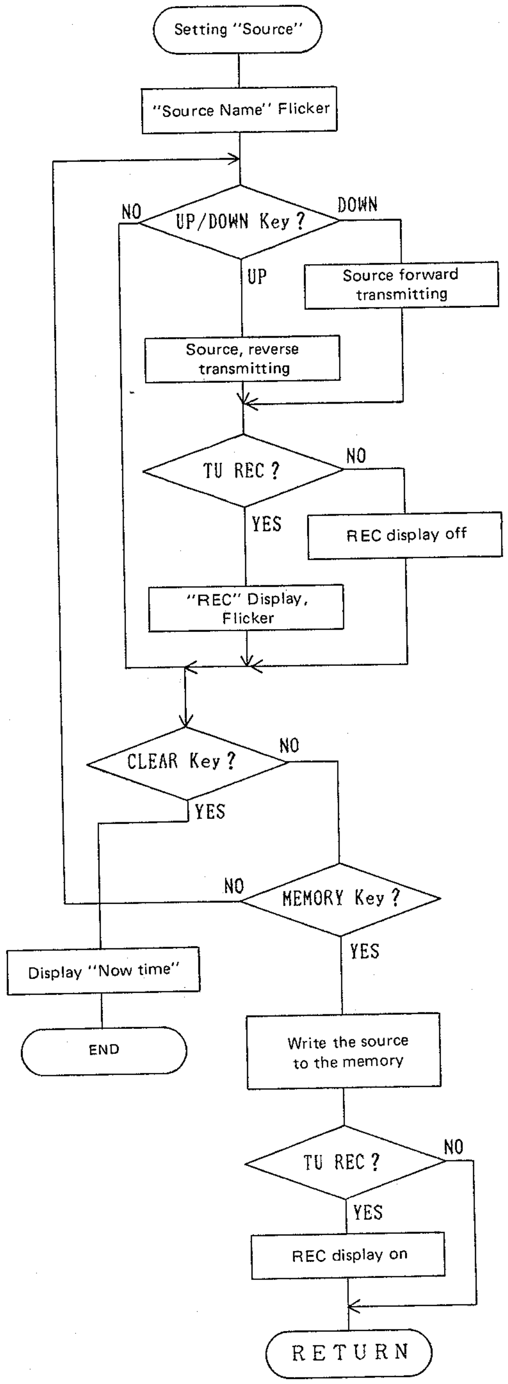
(8) Setting the timer


Press the TIMER key
"TIMER ON" display ON
Time display: "TIMER ON"
t=0
TIMER Key ?
MEMORY Key ?
CLEAR Key ?
SET Key ?
t<5 ?
YES
NO
Setting, Time/Minute
SET/RESET of Timer
Now time display
Timer set?
TIMER ON OFF display off REC SOURCE
END
"ON" display OFF
"OFF" DISPLAY ON
Timer display: "Timer off"
t=0
TIMER Key ?
MEMORY Key ?
CLEAR Key ?
SET Key ?
t<5 ?
Setting Time/ Minute
"ON" display OFF
"OFF" display ON
Time display "Timer off"
Setting Time/ Minute
"OFF" display off
"SOURCE" display on
Timer Source Name, Display
t=0
TIMER Key ?
MEMORY Key ?
CLEAR Key ?
SET Key ?
t<5 ?
TU or TU REC ?
Setting the Source
"OFF" display off
SOURCE display on
Timer Source Name, display
Setting the Source
TU or TU REC ?
Timer Source Name display off
Preset Channel Number display
Frequency Display
t=0
TIMER Key ?
MEMORY Key ?
CLEAR Key ?
SET Key ?
t<5 ?
Tuner Band Preset Channel Setting
Timer Source Name display off
Preset Channel No. Display
Frequency Display
Setting, Tuner Band/Preset Channel

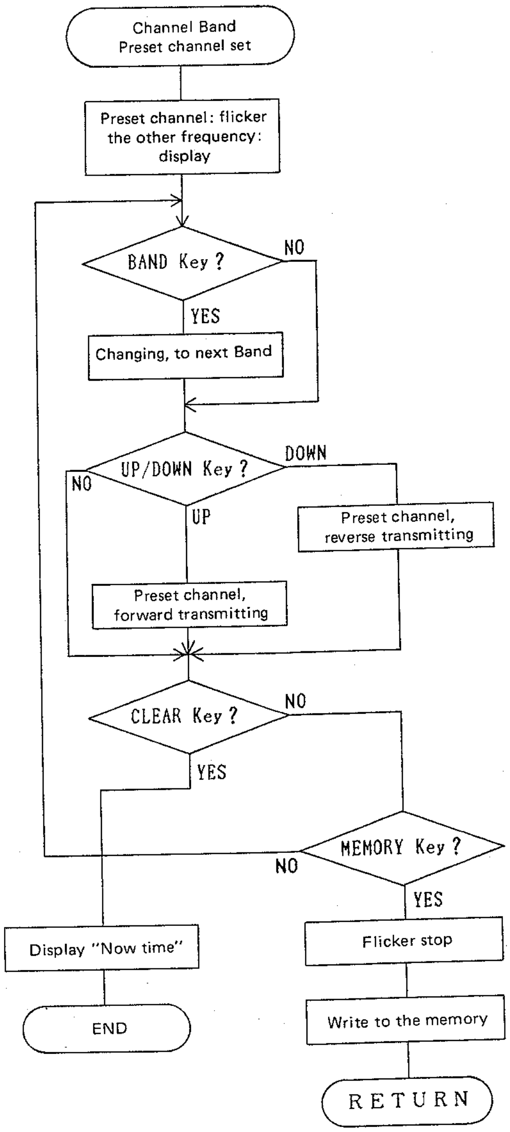
(9) Setting the Time/Minutes (Timer setting)


Time/Minute Adjust
"TIMER" Flicker
UP/DOWN Key ?
UP
DOWN
NO
1 step UP
1 step DOWN
CLEAR Key ?
NO
YES
Press the Key > 0.5 sec?
NO
YES
Display "Now time"
MEMORY Key ?
NO
YES
1 step UP
1 step DOWN
END
Continue to press the Key?
NO
YES
WAIT ≃ 100mS
WAIT ≃ 100mS
"Time" Display on
"Minutes" Flicker
UP/DOWN Key ?
UP
DOWN
NO
1 step UP
1 step DOWN
CLEAR Key ?
NO
Press the Key > 0.5 sec?
Press the key > 0.5 sec?
NO
YES
Display "Now time"
MEMORY Key ?
NO
YES
1 step UP
1 step DOWN
END
Write "Time/Minute", to the memory
Continue to press the key?
Continue to press the Key?
NO
YES
WAIT ≃ 100mS
RETURN

(10) Setting the source (Timer setting)


Setting "Source"
"Source Name" Flicker
UP/DOWN Key ?
NO
DOWN
UP
Source forward transmitting
Source, reverse transmitting
TU REC ?
NO
YES
REC display off
"REC" Display, Flicker
CLEAR Key ?
NO
YES
NO
MEMORY Key ?
YES
Display "Now time"
END
Write the source to the memory
TU REC ?
NO
YES
REC display on
RETURN

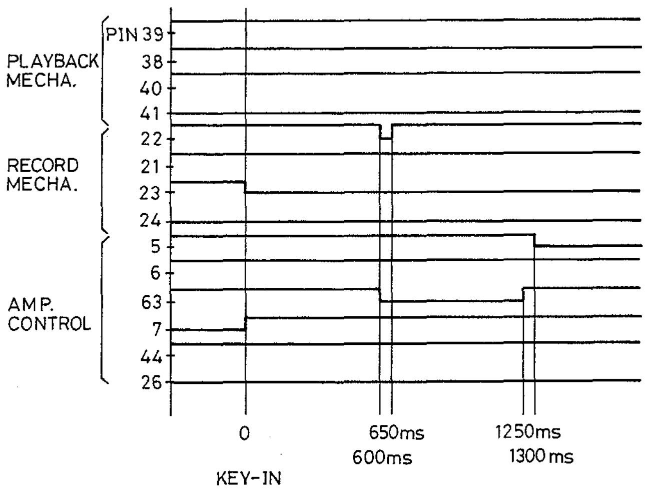
(11) Tuner band channel preset the set (Timer setting)


Channel Band
Preset channel set
Preset channel: flicker
the other frequency: display
BAND Key ?
NO
YES
Changing, to next Band
UP/DOWN Key ?
DOWN
NO
UP
Preset channel, reverse transmitting
Preset channel, forward transmitting
CLEAR Key ?
NO
YES
MEMORY Key ?
NO
YES
Display "Now time"
END
Flicker stop
Write to the memory
RETURN

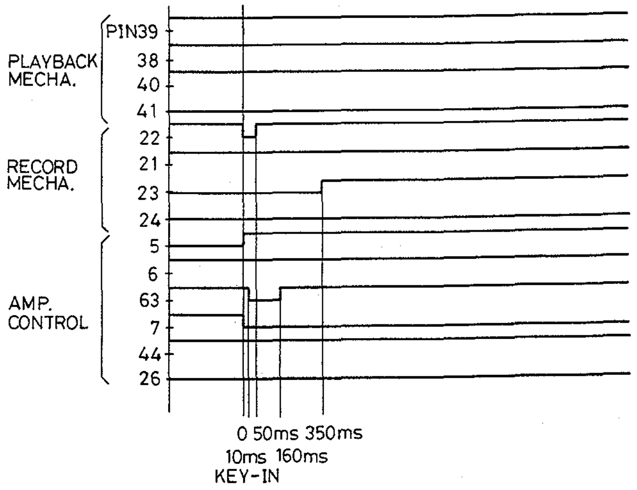
TIMING CHART (DECK SECTION)

IC601 (LC65508B) マイコン

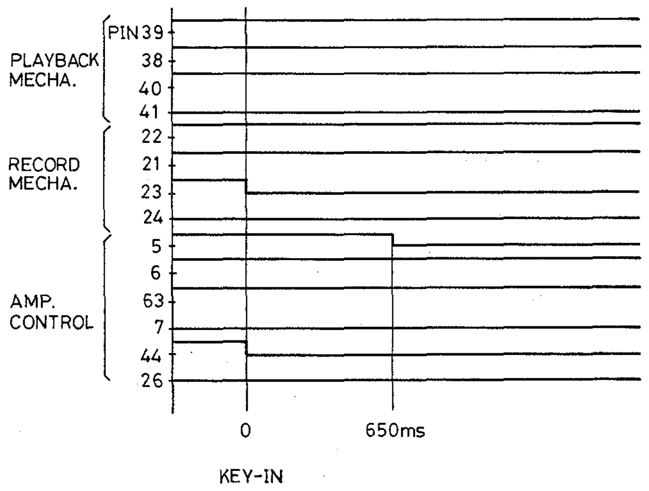
1. MODE: STOP → N·PLAY


PLAYBACK MECHA.
RECORD MECHA.
AMP. CONTROL
PIN 39
38
40
41
22
21
23
24
5
6
63
7
44
26
0
650ms
600ms
1250ms
1300ms
KEY-IN

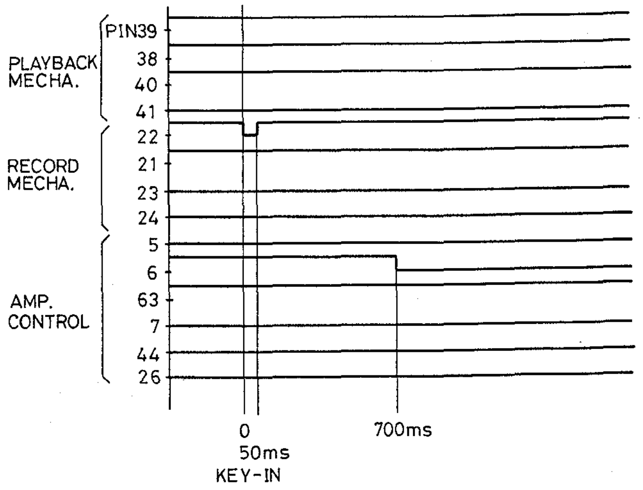
2. MODE: N·PLAY → STOP


PLAYBACK MECHA.
RECORD MECHA.
AMP. CONTROL
PIN39
38
40
41
22
21
23
24
5
6
63
7
44
26
0
50ms
350ms
10ms
160ms
KEY-IN

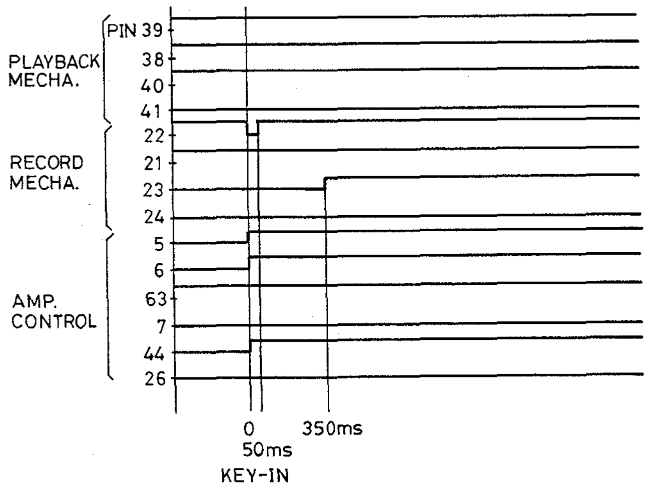
3. MODE: STOP → F·REC/PAUSE


PLAYBACK MECHA.
RECORD MECHA.
AMP. CONTROL
PIN39
38
40
41
22
21
23
24
5
6
63
7
44
26
0
650ms
KEY-IN

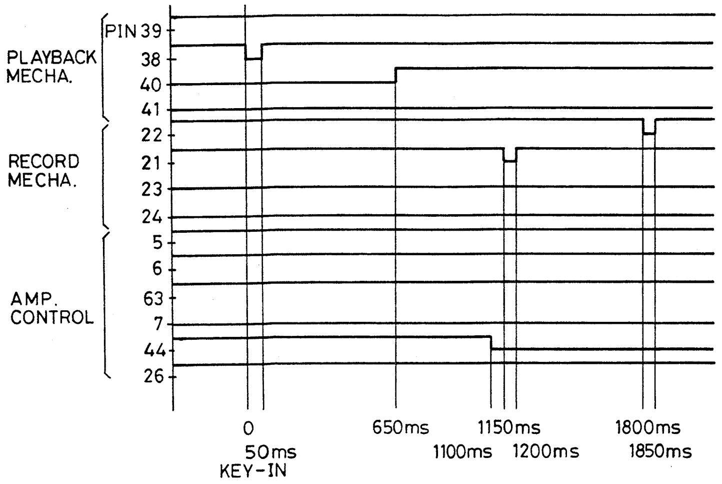
4. MODE: F·REC/PAUSE → F·REC/PLAY


PLAYBACK MECHA.
RECORD MECHA.
AMP. CONTROL
PIN39
38
40
41
22
21
23
24
5
6
63
7
44
26
0
700ms
50ms
KEY-IN

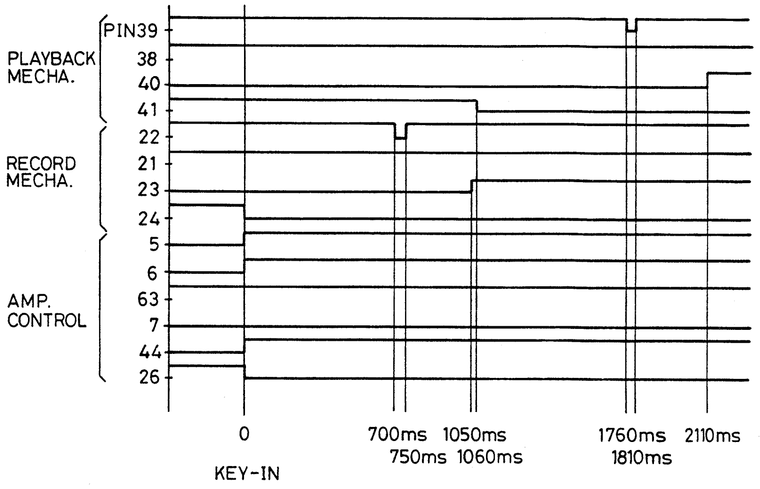
5. MODE: F·REC/PLAY → STOP


PLAYBACK MECHA.
RECORD MECHA.
AMP. CONTROL
PIN 39
38
40
41
22
21
23
24
5
6
63
7
44
26
0
350ms
50ms
KEY-IN

6. MODE: HIGH SPEED DUBBING STOP → START



7. MODE: F·HIGH SPEED DUBBING START → STOP



Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
TU / PRI PCB		
Leiterplatte (P201) P.C .B . Circuit imprimé		6913 14 55
Integrierte Schaltungen **Intgrated Circuits** **Circuits Intégrés**		
IC 201	IC LA 1265 S	3771 61 13
IC 301	IC LA 3361	3763 14 77
IC 403	IC LC 7218 PLL	3771 62 48
IC 701	IC LC 7818	3771 57 33
IC 703	IC LA 6558 DS	3771 43 10
IC 901	IC LB 1641	3771 54 25
Transistoren **Transistors**		
Q 101	2 SK 544 E	3614 43 04
Q 102	2 SC 2999 E	3614 49 84
Q 103	2 SC 930 E	3614 49 43
Q 104	2 SC 2999 E	3614 49 84
Q 105	2 SK 544 E	3614 43 04
Q 151	2 SC 3330 T,U	3614 44 48
Q 152	2 SD 1012 G	3614 52 06
Q 153	2 SD 1012 G	3614 52 06
Q 154	2 SD 1012 G	3614 52 06
Q 155	2 SD 1012 G	3614 52 06
Q 156	2 SD 1012 G	3614 52 06
Q 157	2 SK 222 D	3614 75 23
Q 158	2 SC 3330 T,U	3614 44 48
Q 201	2 SC 930 EIFSPA	3614 75 58
Q 202	2 SC 3330 T,U	3614 44 48
Q 203	2 SA 608 F	3614 52 81
Q 301	2 SC 3330 T,U	3614 44 48
Q 302	2 SC 3330 T,U	3614 44 48
Q 351	2 SA 608 F	3614 52 81
Q 352	2 SC 3330 T,U	3614 44 48
Q 353	2 SD 1012 G	3614 52 06
Q 354	2 SD 1012 G	3614 52 06
Q 403	2 SA 608 F	3614 52 81
Q 404	2 SA 608 F	3614 52 81
Q 405	2 SA 608 F	3614 52 81

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Q 407	2 SC 3331 U	3614 46 50
Q 431	2 SK 222 D	3614 75 23
Q 432	2 SC 1571 FNP	3614 75 59
Q 601	DTA 114 YS	3614 75 60
Q 602	DTA 114 YS	3614 75 60
Q 604	DTA 114 YS	3614 52 32
Q 605	DTC 114 YS	3614 52 32
Q 606	DTC 114 YS	3614 52 32
Q 607	DTC 114 YS	3614 52 32
Q 608	DTC 114 YS	3614 52 32
Q 609	DTA 114 YS	3614 75 60
Q 610	2 SC 3330 T,U	3614 44 48
Q 611	2 SC 3330 T,U	3614 44 48
Q 612	2 SC 3330 T,U	3614 44 48
Q 614	2 SC 3330 T,U	3614 44 48
Q 615	2 SA 608 F	3614 52 81
Q 617	DTA 114 YS	3614 75 60
Q 621	2 SC 3330 T,U	3614 44 48
Q 705	2 SC 3330 T,U	3614 44 48
Q 706	2 SC 3330 T,U	3614 44 48
Q 710	2 SC 3330 T,U	3614 44 48
Q 805	2 SC 3330 T,U	3614 44 48
Q 806	2 SC 3330 T,U	3614 44 48
Q 810	2 SC 3330 T,U	3614 44 48
Q 998	2 SC 3330 T,U	3614 44 48
Dioden **Diodes**		
D 101	SVC 211 SP-B	3651 15 16
D 102	SVC 211 SP-B	3651 15 16
D 103	SVC 211 SP-B	3651 15 16
D 104	GMA 01	3656 27 70
D 151	VARISTOR	3174 91 29
D 152	VARISTOR	3174 91 29
D 201	GMA 01	3656 27 70
D 301	DS 442 X	3656 27 86
D 302	DS 442 X	3656 27 86
D 401	DS 442 X	3656 27 86
D 410	GMA 01	3656 27 70
D 601	GMA 01	3656 27 70
D 602	GMA 01	3656 27 70
D 603	GMA 01	3656 27 70
D 604	GMA 01	3656 27 70
D 605	GMA 01	3656 27 70
D 606	GMA 01	3656 27 70
D 607	DS 442 X	3656 27 86
D 608	DS 442 X	3656 27 86
D 609	DS 442 X	3656 27 86

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
D 610	DS 442 X	3656 27 86
D 611	DS 442 X	3656 27 86
D 612	DS 442 X	3656 27 86
D 613	DS 442 X	3656 27 86
D 614	GMA 01	3656 27 70
D 615	GMA 01	3656 27 70
D 616	MTZ 7,5 BT	3656 30 09
D 618	DS 442 X	3656 27 86
D 619	DS 442 X	3656 27 86
D 680	GMA 01	3656 27 70
D 681	GMA 01	3656 27 70
D 682	DS 442 X	3656 27 86
D 683	DS 442 X	3656 27 86
D 684	DS 442 X	3656 27 86
D 685	DS 442 X	3656 27 86
D 686	DS 442 X	3656 27 86
D 687	DS 442 X	3656 27 86
D 688	DS 442 X	3656 27 86
D 689	GMA 01	3656 27 70
D 690	GMA 01	3656 27 70
D 691	GMA 01	3656 27 70
D 692	GMA 01	3656 27 70
D 694	GMA 01	3656 27 70
D 695	GMA 01	3656 27 70
D 913	MTZ 4,7 B	3656 33 35
D 921	DS 442 X	3656 27 86
D 922	GMA 01	3656 27 70
Filter **Filters** **Filtres**		
CF 201		4551 92 70
CF 202		4551 92 70
CF 203		4551 92 70
CF 204		4551 92 77
CF 205		4551 92 74
L 105		4551 92 68
L 152	3,7 MHz	4551 92 76
L 201		4551 92 69
T 101		4551 92 65
T 201		4551 92 66
T 202		4551 92 67
Quarz **Quartz**		
X401		4421 23 62

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Spulen **Coils** **Bobines**		
L 101		4543 36 45
L 102		4543 36 42
L 103		4543 36 43
L 104		4543 36 44
L 151		4543 36 52
L 153		4543 36 46
L 154		4543 36 48
T 203		4543 36 40
T 301		4543 36 41
T 302		4543 36 41
Trimmer **Trimmers**		
CT 101	8 PF	3412 91 25
CT 151	11 PF	3412 90 90
CT 152	30 PF	3412 91 03
CT 153	11 PF	3412 90 90
CT 154	30 PF	3412 91 03
Potentiometer **Trimmer Resistors** **Potentiometres**		
VR 201	20 k	3111 91 13
VR 202	10 k	3111 91 11
VR 301	10 k	3111 91 11
VR 302	20 k	3111 91 11
Sicherungswiderstände **Safety Resistors** **Résistances de sécuritées**		
R 401	33 OHM 0,25 W	3131 07 77
R 921	10 OHM	3151 81 80
Schalter **Switche** **Commutateur**		
S 411		4115 86 55

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
DECK PCB		
Leiterplatte (P202) P.C .B . Circuit imprimé		6913 14 56
Integrierte Schaltungen **Intgrated Circuits** **Circuits intégrés**		
IC 501	IC CXA 1101	3771 57 31
IC 602	IC LA 2000	3771 62 50
IC 603	IC ICP-F 15	3771 43 77
IC 604	IC ICP-F 15	3771 43 77
IC 701	IC BA 3416 BL	3771 62 51
IC 702	IC IC LA 3220	3771 55 55
	IC LC 66508 B 4119	7371 62 46
Transistoren **Transistors**		
Q 501	2 SC 3330 T,U	3614 44 48
Q 502	2 SD 1468 S-DCTP	3514 75 22
Q 551	2 SC 3330 T,U	3614 44 48
Q 552	2 SD 1468 S-DCTP	3614 75 22
Q 601	2 SA 608 G	3614 37 33
Q 602	DTC 114 YS	3614 52 32
Q 603	DTC 114 TS	3614 75 61
Q 604	DTC 114 YS	3614 52 32
Q 606	DTC 114 TS	3614 75 61
Q 607	DTC 114 TS	3614 75 61
Q 608	DTC 114 TS	3614 75 61
Q 609	DTC 114 TS	3614 75 61
Q 610	2 SD 400 FMP	3614 46 67
Q 611	DTC 114 YS	3614 52 32
Q 612	2 SC 3331 U	3614 46 50
Q 613	2 SC 3331 U	3614 46 50
Q 614	DTC 114 YS	3614 52 32
Q 615	DTA 114 ES	3614 52 03
Q 616	2 SA 1016 F	3614 52 84
Q 617	2 SD 1011 S	3614 49 35
Q 618	2 SD 1011 S	3614 49 35
Q 619	2 SD 1011 S	3614 49 35
Q 620	2 SC 3330 T,U	3614 44 48
Q 621	2 SC 3330 T,U	3614 44 48
Q 622	DTC 114 TS	3614 75 61
Q 623	DTC 114 TS	3614 75 61
Q 624	DTC 114 TS	3614 75 61
Q 625	DTC 114 TS	3614 75 61

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Q 626	2 SC 3330 T,U	3614 44 48
Q 627	DTA 114 ES	3614 52 03
Q 628	DTC 114 YS	3614 52 32
Q 629	DTA 114 ES	3614 52 03
Q 630	DTC 114 YS	3614 52 32
Q 631	2 SB 598 F-NPAA	3614 45 75
Q 632	2 SB 598 F-NPAA	3614 45 75
Q 633	2 SA 608 G	3614 37 33
Q 634	2 SB 598 F-NPAA	3614 45 75
Q 635	2 SA 608 G	3614 37 33
Q 636	2 SB 598 F-NPAA	3614 45 75
Q 637	2 SB 598 F-NPAA	3614 45 75
Q 638	2 SB 598 F-NPAA	3614 45 75
Q 639	DTC 114 TS	3614 75 61
Q 640	DTC 114 TS	3614 75 61
Q 641	DTC 114 TS	3614 75 61
Q 642	DTC 114 YS	3614 52 32
Q 648	2 SC 3330 T,U	3614 44 48
Q 649	2 SC 3330 T,U	3614 44 48
Q 701	2 SC 3330 T,U	3614 44 48
Q 702	2 SC 3330 T,U	3614 44 48
Q 703	2 SC 3330 T,U	3514 44 48
Q 704	2 SC 3330 T,U	3614 44 48
Q 705	2 SD 1468 S-DCTP	3614 75 22
Q 706	2 SC 3330 T,U	3614 44 48
Q 707	2 SC 3330 T,U	3614 44 48
Q 708	2 SC 3330 T,U	3614 44 48
Q 709	2 SD 1468 S-DCTP	3614 75 22
Q 801	2 SC 3330 T,U	3614 44 48
Q 802	2 SC 3330 T,U	3614 44 48
Q 803	2 SC 3330 T,U	3614 44 48
Q 804	2 SC 3330 T,U	3614 44 48
Q 805	2 SD 1468 S-DCTP	3614 75 22
Q 806	2 SC 3330 T,U	3614 44 48
Q 807	2 SC 3330 T,U	3614 44 48
Q 808	2 SC 3330 T,U	3614 44 48
Q 809	2 SD 1468 S-DCTP	3614 75 22
Q 973	IC L 78 M 05	3614 53 65
Dioden **Diodes**		
D 603	1 SS 133	3656 22 30
D 604	1 SS 133	3656 22 30
D 605	GMA 01	3656 27 70
D 606	GMA 01	3656 27 70
D 628	GMA 01	3656 27 70
D 629	GMA 01	3656 27 70
D 630	GMA 01	3656 27 70

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
D 631	GMA 01	3656 27 70
D 632	1 SS 133	3656 22 30
D 633	1 SS 133	3656 22 30
D 634	1 SS 133	3656 22 30
D 635	GMA 01	3656 27 70
D 701	GMA 01	3656 27 70
D 702	GMA 01	3656 27 70
D 801	GMA 01	3656 27 70
D 802	GMA 01	3656 27 70
Quarz **Quartz**		
X 601	4,19 MHz	4421 24 98
Spulen **Coils** **Bobines**		
L 501		4543 37 31
L 551		4543 37 31
L 601		4543 37 32
L 701		4543 37 33
L 702		4543 36 32
L 704		4543 37 34
L 801		4543 37 33
L 802		4543 36 32
L 804		4543 37 34
Potentiometer **Trimmer Resistors** **Potentiometres**		
VR 601	2,2 k	3111 91 26
VR 602	2,2 k	3111 91 26
VR 603	2,2 k	3111 91 26
VR 604	2,2 k	3111 91 26
VR 605	2,2 k	3111 91 26
VR 606	22 k	3111 91 27
VR 701	10 k	3111 91 28
VR 702	10 k	3111 91 28
VR 703	10 k	3111 91 28
VR 704	100 k	3111 91 29
VR 801	10 k	3111 91 28
VR 802	10 k	3111 91 28
VR 803	10 k	3111 91 28
VR 804	100 k	3111 91 29

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Sicherungswiderstände **Safety Resistors** **Résistances de sécuritées**		
R 971	10 OHM	3151 81 80
R 972	5,6 OHM 0,25 W	3151 83 34
Buchsenplatte **Socket board** **Plaque prise**		4144 82 98
Schalter **Switch** **Commutater**		4112 98 78

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
MAIN AMP PCB		
Leiterplatte (P203) P.C .B . Circuit imprimé		6913 14 85
Integrierte Schaltungen Intgrated Circuits Circuits intégrés		
IC 704	IC LA 6458 DS	3771 43 10
IC 705	IC STK 4157 MK 2	3771 62 52
Transistoren Transistors		
Q 618	2 SC 3330 T,U	3614 45 81
Q 619	2 SC 3330 T,U	3614 45 81
Q 703	2 SC 3330 T,U	3614 44 48
Q 803	2 SC 3330 T,U	3614 44 48
Q 901	2 SC 3330 T,U	3614 44 48
Q 906	DTC 114 YS	3614 52 32
Q 907	DTC 114 YS	3614 52 32
Dioden Diodes		
D 901	RBV 402	3656 31 65
D 902	RL 153 BFS 2	3656 34 22
D 903	RL 153 BFS 2	3656 34 22
D 904	RL 153 BFS 2	3656 34 22
D 905	RL 153B FS 2	3656 34 22
D 912	GMA 01	3656 27 70
D 913	GMA 01	3656 27 70
D 919	GMA 01	3656 27 70
D 929	GMA 01	3656 27 70
D 930	GMA 01	3656 27 70
Sicherungswiderstände Safety Resistors Résistances de sécuritées		
R 919	100 OHM 0,25 W	3131 07 81
R 920	100 OHM 0.25 W	3131 07 81

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
SUB-P.T. PCB		
Leiterplatte (P204) P.C .B . Circuit imprimé		6913 14 57
Transistoren Transistors		
Q 902	SA 608G	3614 37 33
Q 905	2SD 325 F	3614 75 62
Dioden Diodes		
D 906	DSF 10 C	3656 29 96
D 907	DSF 10 C	3656 29 96
D 908	DSF 10 C	3656 29 96
D 909	GZA 27 Z	3656 34 23
D 910	GZA 30 Z	3656 29 78
D 911	MTZ 6,2 CT 77	3656 32 44
D 915	MTZ 5,6 B-T-77	3656 30 81
D 918	GMA 01	3656 27 70
D 928	DS 442 X	3656 27 86
Relais Relay		4124 10 42
FUSE PCB		
Leiterplatte (P205) P.C .B . Circuit imprimé		6913 14 58
Sicherungen Fuses Fusibles		
F 601	0,315 AT	4375 10 11
F 701		4376 88 03
F 801		4376 88 03
F 901	1,25 AM	4374 10 17

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
SPEAKER SW PCB		
Leiterplatte (P206)		6913 14 59
P.C .B .		
Circuit imprimé		
Dioden		
Diodes		
D 631	1 S 188 AM	3662 21 60
D 634	1 S 188 AM	3656 21 60
Schalter		4112 98 79
Switch		
Commutater		
REGULATOR 1 PCB		
Leiterplatte (P207)		6913 14 60
P.C .B .		
Circuit imprimé		
Integrierte Schaltung		
Intgrated Circuit		
Circuit intégrés		
IC 902	IC NJM 78 M 15 FA	3771 62 53
REGULATOR 2 PCB		
Leiterplatte (P208)		6913 14 61
P.C .B .		
Circuit imprimé		
Integrierte Schaltung		
Intgrated Circuit		
Circuit intégrés		
IC 903	IC NJM 79 M 15 FA	3771 62 54
SP TERMINAL PCB		
Leiterplatte (P210)		6913 14 63
P.C .B .		
Circuit imprimé		

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
P.T. SEC. PCB		
Leiterplatte (P209)		6913 14 62
P.C .B .		
Circuit imprimé		
Integrierte Schaltungen		
Intgrated Circuits		
Circuits intégrés		
IC 990	IC ICPF 50	3771 62 55
IC 991	IC ICPF 50	3771 62 55
FL AMP PCB		
Leiterplatte (P211)		6913 14 64
P.C .B .		
Circuit imprimé		
Integrierte Schaltung		
Intgrated Circuit		
Circuit intégrés		
IC 706	IC LC 7566	3771 62 56
Transistoren		
Transistors		
Q 903	2 SC 3330 T,U	3614 44 48
Q 904	DTA 114 YS	3614 75 60
Dioden		
Diodes		
D 632	MTZ 5,1 B	3656 29 70
D 702	MTZ 5,1 B	3656 29 70
D 802	MTZ 5,1 B	3656 29 70
D 914	GZA 3,3 Y	3656 27 71
D 919	GMA 01	3656 27 70

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
FL TUNER PCB		
Leiterplatte (P212)		6913 14 65
P.C .B .		
Circuit imprimé		
Integrierte Schaltung		
Intgrated Circuit		
Circuit intégrés		
IC 404	IC HD 404708 A	3771 62 57
Dioden		
Diodes		
D 402	GMA 01	3656 27 70
D 403	GMA 01	3656 27 70
D 404	GMA 01	3656 27 70
Quarz		
Quartz		
X 402		4421 23 63
Spule		
Coil		
Bobine		
L 401		4552 73 30
Trimmer		
CT 401	30 PF	3412 91 03
Display		3681 18 01
Winkel		8318 56 03
Bracket		
Equerre		

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
TUNER SW PCB		
Leiterplatte (P213)		6913 14 66
P.C .B .		
Circuit imprimé		
Dioden		
Diodes		
D 405	GMA 01	3656 27 70
D 406	GMA 01	3656 27 70
D 407	GMA 01	3656 27 70
D 408	GMA 01	3656 27 70
Schalter		
Switches		
Commutateurs		
S 401		4112 98 80
S 402		4112 98 80
S 403		4112 98 80
S 404		4112 98 80
S 405		4112 98 80
S 406		4112 98 80
S 407		4112 98 80
S 408		4112 98 80
S 409		4112 98 80
S 410		4112 98 80
MECHA,TAPE-A PCB		
Leiterplatte (P214)		6913 14 67
P.C .B .		
Circuit imprimé		
Dioden		
Diodes		
D 610	1 SS 133	3656 22 30
D 611	1 SS 133	3656 22 30
D 612	1 SS 133	3656 22 30
D 613	1 SS 133	3656 22 30
D 614	1 SS 133	3656 22 30
D 615	1 SS 133	3656 22 30
D 616	1 SS 133	3656 22 30
D 617	1 SS 133	3656 22 30
D 618	1 SS 133	3656 22 30
D 639	SLR 34 MC 3 FN	3681 18 02
D 640	SLR 34 VC 3 F	3681 17 72
D 641	LED SLR 34 MC 3 FN	3681 18 02

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Schalter **Switches** **Commutateurs**		
S 601		4112 98 81
S 602		4112 98 81
S 603		4112 98 80
S 604		4112 98 81
S 605		4112 98 80
S 606		4112 98 80
S 607		4112 98 81
S 608		4112 98 81
S 609		4112 98 81
S 901		4112 98 81
FUNCTION SW PCB		
Leiterplatte (P216) P.C .B . Circuit imprimé		6913 14 69
Transistor		
Q 620	2 SC 3330 Z,U	3614 44 48
Dioden **Diodes**		
D 991	LED SLR 55 DC	3681 18 03
D 992	LED SLR 55 DC	3681 18 03
D 993	LED SLR 55 DC	3681 18 03
D 994	LED SLR 55 DC	3681 18 03
D 995	LED SLR 55 DC	3681 18 03
D 996	LED SLR 55 DC	3681 18 03
Taster **Pushbutton** **Bouton-Poussoir**		4115 86 50

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
MECHA,TAPE-B PCB		
Leiterplatte (P215) P.C .B . Circuit imprimé		6913 14 68
Dioden **Diodes**		
D 619	1 SS 133	3656 22 30
D 620	1 SS 133	3656 22 30
D 621	1 SS 133	3656 22 30
D 622	1 SS 133	3656 22 30
D 623	1 SS 133	3656 22 30
D 625	1 SS 133	3656 22 30
D 626	1 SS 133	3656 22 30
D 627	1 SS 133	3656 22 30
D 642	1 SS 133	3656 22 30
D 643	LED SLR 34 MC 3 FN	3681 18 02
D 644	LED SLR 34 MC 3 FN	3681 18 02
D 645	LED SLR 34 VC 3 F	3681 17 72
Schalter **Switches** **Commutateurs**		
S 610		4112 98 80
S 611		4112 98 80
S 612		4112 98 80
S 613		4112 98 80
S 614		4112 98 81
S 615		4112 98 80
S 616		4112 98 80
S 617		4112 98 81
S 618		4112 98 81
S 619		4112 98 81
S 620		4112 98 81
S 621		4112 98 81
S 622		4112 98 81
S 623		4112 98 81

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
MAIN VR PCB		
Leiterplatte (P217) P.C .B . Circuit imprimé		6913 14 70
Transistoren **Transistors**		
Q 702	2 SC 3330 T,U	3614 44 48
Q 704	2 SC 3330 T,U	3614 44 48
Q 802	2 SC 3330 T,U	3614 44 48
Q 804	2 SC 3330 T,U	3614 44 48
Dioden **Diodes**		
D 924	GMA 01	3656 27 70
D 997	GMA 01	3656 27 70
Potentiometer **Trimmer Resistors** **Potentiometres**	100 k	3112 98 61
BASS / TREBLE CONT. PCB		
Leiterplatte (P219) P.C .B . Circuit imprimé		6913 14 72
Integrierte Schaltung **Intgrated Circuit** **Circuit intégrés**		
IC 702	IC LA 6458 DS	3771 43 10
Dioden **Diodes**		
D 701	GMA 01	3656 27 70
D 705	GMA 01	3656 27 70
D 801	GMA 01	3656 27 70
D 805	GMA 01	3656 27 70

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
PCB		
Leiterplatte (P218) P.C .B . Circuit imprimé		6913 14 71
Potentiometer **Trimmer Resistors** **Potentiometres**		3112 98 62
BASS / TREBLE PCB		
Leiterplatte (P220) P.C .B . Circuit imprimé		6913 14 73
Potentiometer	100 k	3112 14 63
Trimmer Resistors	100 k	3112 98 64
Potentiometres		
DOLBY SW PCB		
Leiterplatte (P221) P.C .B . Circuit imprimé		6913 14 74
Schalter		4112 98 82
Switch		4112 98 83
Commutateur		
VR LED PCB		
Leiterplatte (P222) P.C .B . Circuit imprimé		6913 14 75
LED	SLC 22 DU 5 FG	3681 18 04
MAIN VR PCB		
Leiterplatte (P223) P.C .B . Circuit imprimé		6913 14 76
Spule **Coil** **Bobin**		
L 901		4543 37 35

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
PHONO AMP PCB		
Leiterplatte (P224)		6913 14 77
P.C .B .		
Circuit imprimé		
Integrierte Schaltungn		
Intgrated Circuit		
Circuit intégrés		
IC 740	IC LA 6458 DS	3771 43 10
+12 V MOTOR PCB		
Leiterplatte (P225)		6913 14 78
P.C .B .		
Circuit imprimé		
Integrierte Schaltung		
Intgrated Circuit		
Circuit intégrés		
IC 905	IC AN 7812 F	3771 62 58
+12 V TU / DECK PCB		
Leiterplatte (P226)		6913 14 79
P.C .B .		
Circuit imprimé		
Integrierte Schaltung		
Intgrated Circuit		
Circuit intégrés		
IC 904	IC AN 7812 F	3771 62 58

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
CD MAIN PCB		
Leiterplatte (P227)		6913 14 86
P.C .B .		
Circuit imprimé		
Integrierte Schaltungen		
Intgrated Circuits		
Circuits intégrés		
IC 101	IC LA 9200 NM	3771 57 47
IC 201	IC LA 6510	3771 57 48
IC 202	IC LA 6510	3771 57 48
IC 301	IC UPD 75216	3771 62 59
IC 401	IC LC 7860 KA	3771 62 60
IC 402	IC LC 3517 AS 15	3771 57 51
IC 501	IC LC 7881 C	3771 62 61
IC 503	IC LA 6458 DS	3771 43 10
IC 504	IC LA 6458 DS	3771 43 10
IC 505	IC LA 6458 DS	3771 43 10
IC 506	IC TC 9154 P	3763 14 50
IC 507	IC LB1 403	3763 14 52
IC 601	IC M 5278 D 05	3771 62 62
IC 602	IC L79 M 05	3771 57 53
Transistoren		
Transistors		
Q 101	DTA 113 ZS	3614 45 18
Q 102	2 SC 3400	3614 49 86
Q 201	2 SC 1740 XTPQRS	3614 52 40
Q 202	2 SC 1740 XTPQRS	3614 52 40
Q 203	2 SC 3400	3614 49 86
Q 204	2 SC 3400	3614 49 86
Q 205	2 SC 3400	3614 49 86
Q 206	2 SD 1012 G	3614 52 06
Q 322	2 SC 1740 XTPQRS	3614 52 40
Q 323	2 SC 1740 XTPQRS	3614 52 40
Q 324	2 SC 1740 XTPQRS	3614 52 40
Q 325	2 SA 608 F	3614 52 81
Q 326	2 SD 545 F,NP	3614 43 67
Q 327	2 SB 598 F-NPAA	3614 45 75
Q 351	2 SC 3400	3614 49 86
Q 352	2 SA 1345	3614 52 80
Q 353	2 SC 3400	3614 49 86
Q 354	2 SA 1345	3614 52 80

Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Q 355	2 SC 3400	3614 49 86
Q 356	2 SC 3400	3614 49 86
Q 358	2 SC 3400	3614 49 86
Q 359	2 SA 1345	3614 52 80
Q 360	2 SC 3400	3614 49 86
Q 361	2 SC 3400	3614 49 86
Q 501	2 SC 1740 XTPQRS	3614 52 40
Q 502	2 SC 1740 XTPQRS	3614 52 40
Q 503	2 SC 1740 XTPQRS	3614 52 40
Q 504	2 SC 1740 XTPQRS	3614 52 40
Q 505	2 SC 1740 XTPQRS	3614 52 40
Q 506	2 SC 1740 XTPQRS	3614 52 40
Q 507	2 SC 1740 XTPQRS	3614 52 40
Q 601	2 SA 1503	3614 45 17
Q 602	2 SC 3400	3614 49 86
Q 604	2 SA 608 F	3614 52 81
Dioden		
Diodes		
D 101	SVC 211 SP-B	3651 15 16
D 103	GMA 01	3656 27 70
D 104	GMA 01	3656 27 70
D 105	GMA 01	3656 27 70
D 106	GMA 01	3656 27 70
D 201	GMA 01	3656 27 70
D 202	GMA 01	3656 27 70
D 203	GMA 01	3656 27 70
D 204	GMA 01	3656 27 70
D 301	GMA 01	3656 27 70
D 302	GMA 01	3656 27 70
D 303	GMA 01	3656 27 70
D 304	GMA 01	3656 27 70
D 306	GMA 01	3656 27 70
D 307	GMA 01	3656 27 70
D 308	GMA 01	3656 27 70
D 309	GMA 01	3656 27 70
D 310	GMA 01	3656 27 70
D 311	GMA 01	3656 27 70
D 312	GMA 01	3656 27 70
D 313	GMA 01	3656 27 70
D 314	GMA 01	3656 27 70
D 315	DS 442 X	3656 27 86
D 317	GZS 9,1 Y	3656 30 52
D 320	GMA 01	3656 27 70
D 321	GMA 01	3656 27 70
D 601	DSF 10 C	3656 29 96
D 602	DSF 10 C	3656 29 96
D 603	DSF 10 C	3656 29 96

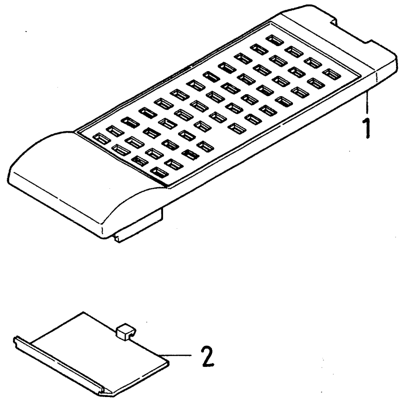
Pos.-Nr. Ref. No. No. de pos.	Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
D 604	DSF 10 C	3656 29 96
D 607	GMA 01	3656 27 70
D 608	GZS 5,1 Y	3656 30 53
D 609	GMA 01	3656 27 70
D 610	GMA 01	3656 27 70
D 611	GZS 6,8 Y	3656 30 62
Filter		
Filters		
Filtres		
T 101		4552 73 27
T 501		4552 73 28
T 502		4552 73 28
Quarz		
Quartz		
X 301	4,19 MHz	4421 24 98
X 401	8,64 MHz	4421 24 99
X 419		4421 23 64
X 864	8,64 MHz	4421 24 99
Spulen		
Coils		
Bobines		
L 301		4552 73 30
L 401		4552 73 29
T 102		4543 33 07
Potentiometer		
Trimmer Resistors		
Potentiometres		
VR 101	10 k	3111 89 88
VR 102	100 k	3111 89 89
VR 103	50 k	3111 89 90
VR 104	20 k	3111 89 91
VR 301	10 k	3111 89 88

Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
CD FL PCB	
Leiterplatte (P228) P.C .B . Circuit imprimé	6913 14 80
Winkel **Bracket** **Commutateur**	8318 57 23
PCB	
Leiterplatte (P229) P.C .B . Circuit imprimé	6913 14 81
Schalter **Switch** **Commutateur**	4112 98 84
FSZ PCB	
Leiterplatte (P230) P.C .B . Circuit imprimé	6913 14 82

Gegenstand Description Description	Bestell-Nr. Part No. No. de comm.
Allgemeine Bauteile **General Parts** **Piéces générales**	
Verpackungskarton Packing Case Carton d'emballage	6162 87 13 6162 41 32 *
Verpackungspolster Cushion Ass'y Coussin d'emballage	6171 50 88
Verpackungspolster Cushion Ass'y Coussin d'emballage	6171 50 89
Bedienungsanleitung Operating Instruction Mode d'emploi	6612 56 99 6612 56 86 *
Antenne Antenna	4472 90 12
Halter (Antenne) Holder (Antenna) Support (Antenne)	8681 46 69
Wurfantenne Throw-out antenna	4472 90 13
Netzkabel Mains lead Câble de réseau	4131 40 45
IFB-Sender IFB Transmitter Télécommande	5652 22 15
CD-Deck	5863 10 05

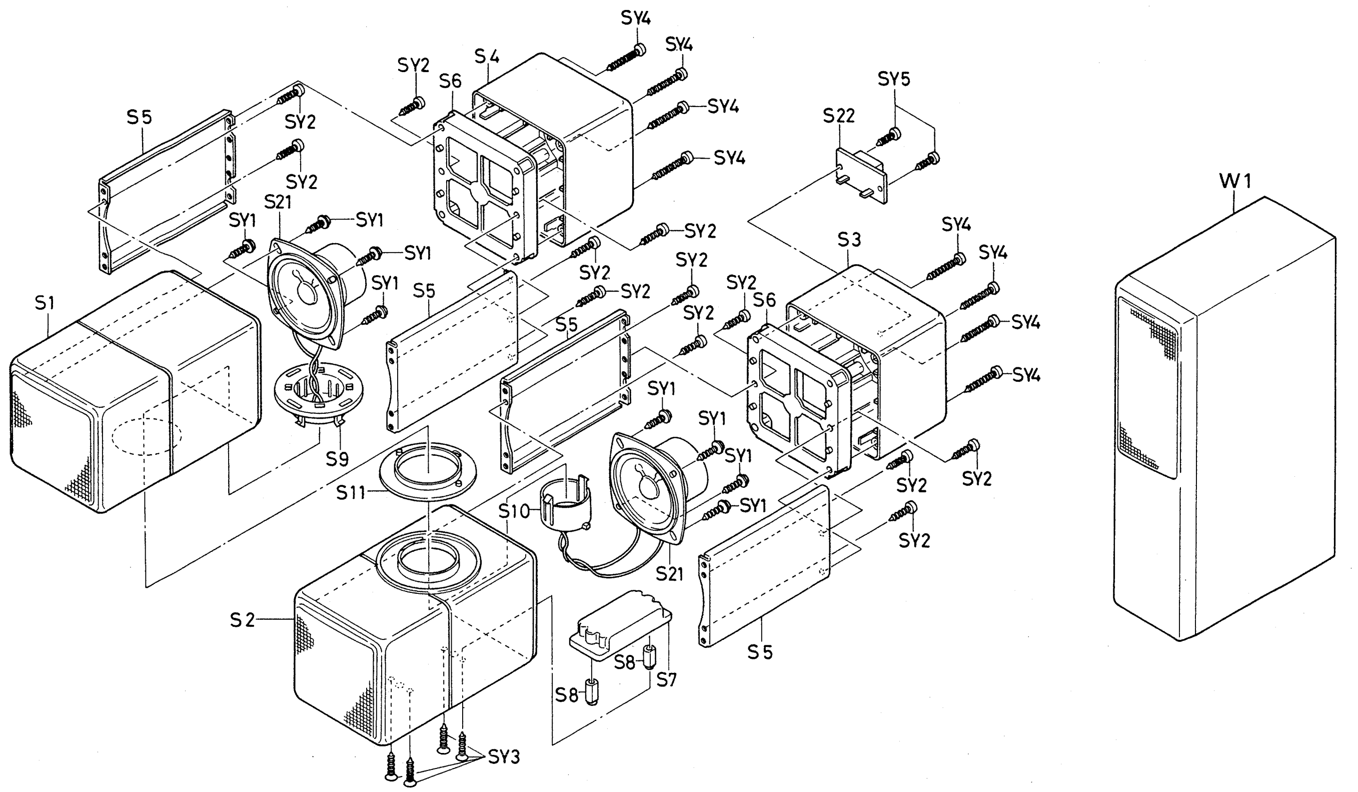
* für/for/pour CD 8550 LUXOR

EXPLODED VIEW & PARTS LIST (REMOTE CONTROLLER)



Ref. No.	Part No.	Description
1	614 222 0221	ASSY, REMOCON
2	614 213 5365	LID, BATTERY

EXPLODED VIEW & PARTS LIST (SCOCA & WOOFER SPEAKER)


SY4
SY4
SY2
S4
S6
SY4
SY4
S5
SY2
SY2
S21
SY1
SY1
SY1
SY1
SY5
S22
W1
SY2
SY2
SY2
SY2
S5
S5
S3
SY4
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SY1
SY1
SY1
SY1
S9
S11
S10
SY2
SY2
SY2
S21
S5
S2
S8
S7
S8
SY3

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 214 5128	PAD, FRONT (L) BACK (R)
	614 214 5135	PAD, FRONT (R) BACK (L)
	614 214 5111	PAD, CORNER PAD
	614 176 4214	INNER POLYE COVER, PROTECT SPS
	614 211 5169	SHEET 350X650X1T
	614 176 1459	INNER POLYE COVER,
	614 211 4087	SHEET 450X1500X1T
	614 221 3506	INNER CARTON

CABINET & CHASSIS

Ref. No.	Part No.	Description
W1	614 213 2820	ASSY, CABINET, SPEAKER
S1	614 211 4933	ASSY, CABINET, LOWER
S2	614 211 4940	ASSY, CABINET, UPPER
S3	614 211 4957	ASSY, CABINET, REAR, LOWER
S4	614 210 6945	CABINET, REAR, UPPER
S5	614 210 6631	MOUNT-M, CABI, REAR CONECT
S6	614 210 6648	MOUNT-M, CABI, REAR REINFORCE
S7	614 210 6655	MOUNT-M
S8	614 210 6686	POST, SP BOX HOLD
S9	614 210 6662	JOINT, CABI CONECT
S10	614 210 6679	LOCK, CABI CONECT
S11	614 210 6693	SPACER, CABI CONECT
S12	614 125 6443	CUSHION
S13	614 221 3148	RATING PLATE

FIXING PARTS

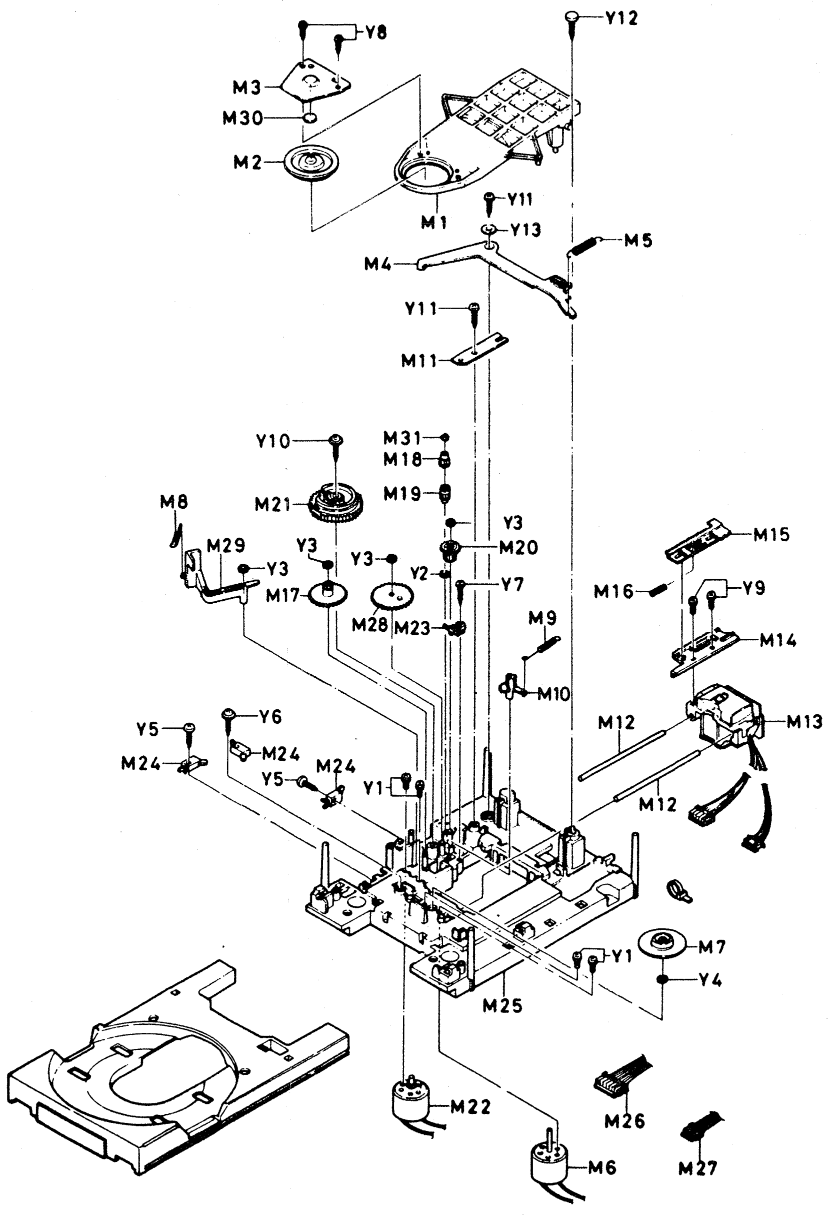
Ref. No.	Part No.	Description
SY1	411 020 8905	SCR S-TPG BRZ+FLG 3X10
SY2	411 021 3503	SCR S-TPG BIN 3X10
SY3	411 022 3106	SCR S-TPG FLT 3X12
SY4	411 023 6700	SCR S-TPG PAN 3X25
SY5	411 021 4104	SCR S-TPG BIN 3X12

ELECTRICAL PARTS

Ref. No.	Part No.	Description
S21	614 213 1978	SPEAKER
S22	614 211 1703	TERMINAL

Pos.-Nr. Ref. No. No. de pos.	Bestell-Nr. Part No. No. de comm.	Pos.-Nr. Ref. No. No. de pos.	Bestell-Nr. Part No. No. de comm.
M 1	8318 57 24	M 15	7525 12 36
M 2	8681 45 79	M 16	7358 42 66
M 3	8318 57 25	M 17	7525 12 37
M 4	8318 54 33	M 18	7525 12 38
M 5	7358 42 63	M 19	7525 12 39
M 6	4432 93 11	M 20	7525 12 40
M 7	7525 12 93	M 22	4432 93 12
M 8	7358 42 64	M 23	4188 05 24
M 9	7358 42 65	M 24	4188 05 25
M 10	8681 42 67	M 25	8318 57 26
M 11	8318 54 35	M 28	7525 12 42
M 12	7578 05 76	M 29	8681 42 69
M 13	4335 93 44	M 31	7726 06 37
M 14	7525 12 35	M 33	7548 42 46

EXPLODED VIEW & PARTS LIST (CD MECHANISM)


Y8
Y12
M3
M30
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M1
Y11
Y13
M5
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M18
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M24
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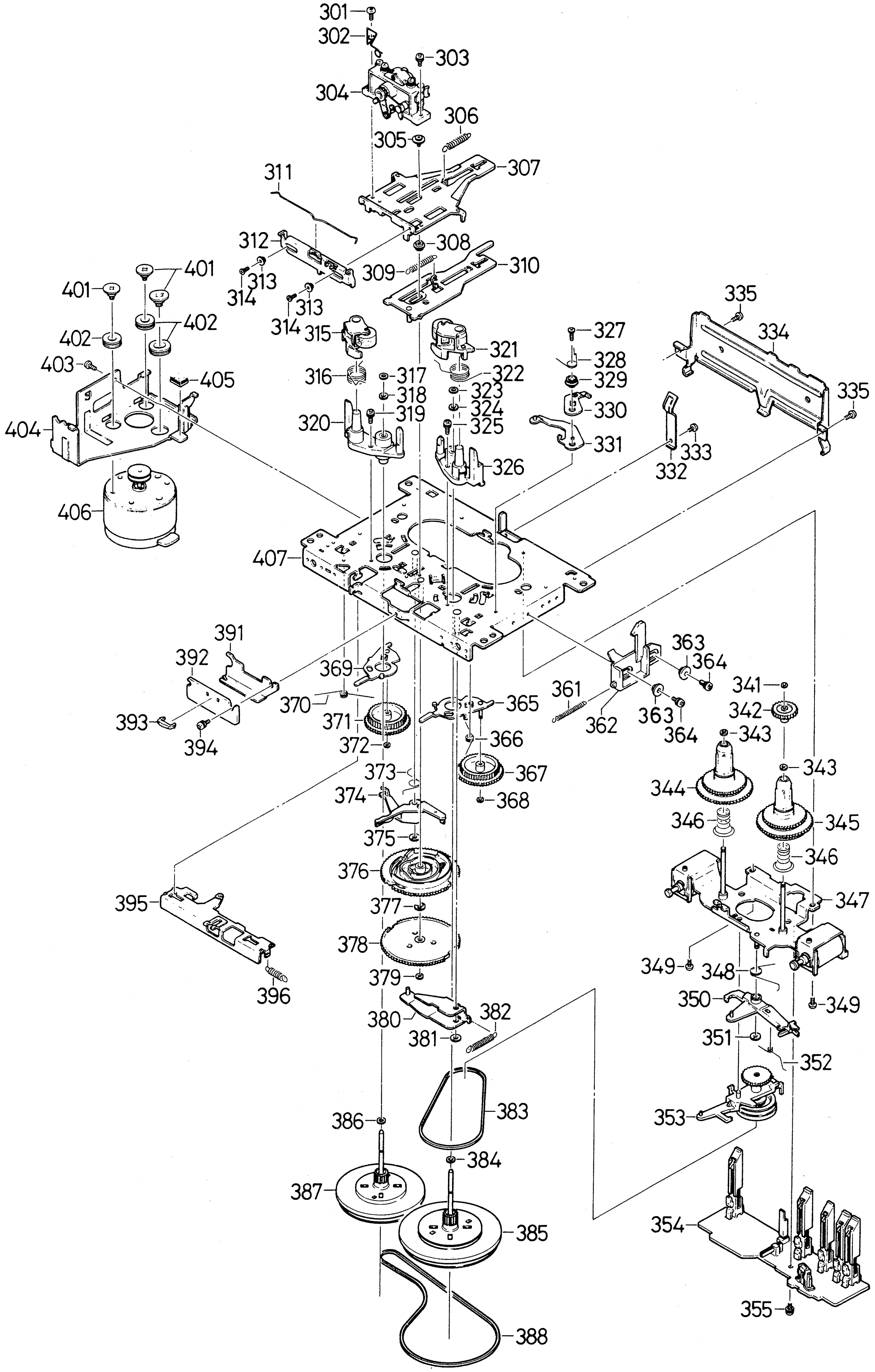
M27

EXPLODED VIEW (TAPE MECHANISM "B")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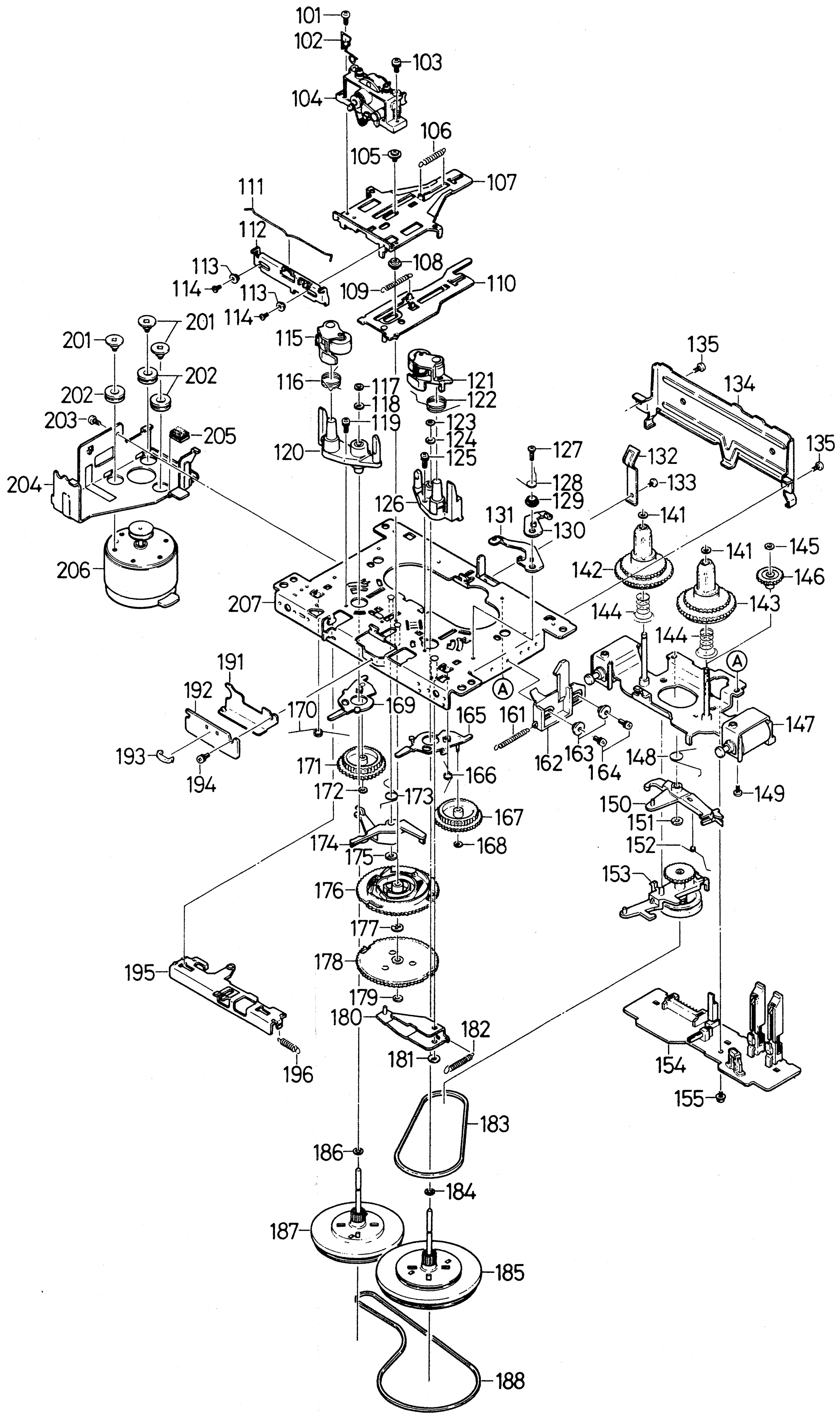
Pos.-Nr. Ref. No. No. de pos.	Bestell-Nr. Part No. No. de comm.
304	4335 94 15
306	7358 45 27
307	8318 57 27
308	6568 11 76
309	7358 45 28
310	8318 57 28
311	7358 45 29
312	8318 57 29
315	7538 45 30
316	7358 45 31
320	8318 57 30
321	7538 45 32
322	7358 45 33
326	8318 57 31
328	7358 45 34
329	6568 11 74
330	8318 57 32
331	8318 57 33
332	7358 45 35
334	8318 57 34
342	7525 12 94
344	6253 42 27
345	6253 42 28
346	7358 45 36
347	4671 90 22
348	7358 45 37
350	8318 57 35
352	7358 45 38
353	7424 01 51
354	6913 14 83
361	7358 45 39
362	8681 46 80
363	6568 11 75
365	8318 57 36
366	7358 45 40
367	7525 12 97
369	8318 57 37
370	7358 45 41
371	7525 12 97
373	7358 45 42
374	8318 57 38
376	7525 12 95
378	7525 12 96
380	8318 57 39
382	7358 45 43
383	7618 43 08
385	7518 41 25
387	7518 41 26
388	7618 43 09
391	8318 57 40
392	6913 14 84
395	4112 98 85
396	3584 54 44
404	8318 57 41
406	4432 93 42

Pos.-Nr. Ref. No. No. de pos.	Bestell-Nr. Part No. No. de comm.
104	4335 94 14
106	7358 45 27
107	8318 57 27
108	6568 11 76
109	7358 45 28
110	8318 57 28
111	7358 45 29
112	8318 57 29
115	7538 45 30
116	7358 45 31
120	8318 57 30
121	7538 45 32
122	7358 45 33
126	8318 57 31
128	7358 45 34
129	6568 11 74
130	8318 57 32
131	8318 57 33
132	7358 45 35
134	8318 57 34
142	6253 42 27
143	6253 42 28
144	7358 45 36
146	7525 12 94
147	4671 90 22
148	7358 45 37
150	8318 57 35
152	7358 45 38
153	7424 01 51
161	7358 45 39
162	8681 46 80
163	6568 11 75
165	8318 57 36
166	7358 45 40
167	7525 12 97
169	8318 57 37
170	7358 45 41
171	7525 12 97
173	7358 45 42
174	8318 57 38
176	7525 12 95
178	7525 12 96
180	8318 57 39
182	7358 45 43
183	7618 43 08
185	7518 41 25
187	7518 41 26
188	7618 43 09
191	8318 57 40
192	6913 14 88
195	4112 98 85
196	7358 45 44
204	8318 57 41
206	4432 93 42

EXPLODED VIEW (TAPE MECHANISM "A")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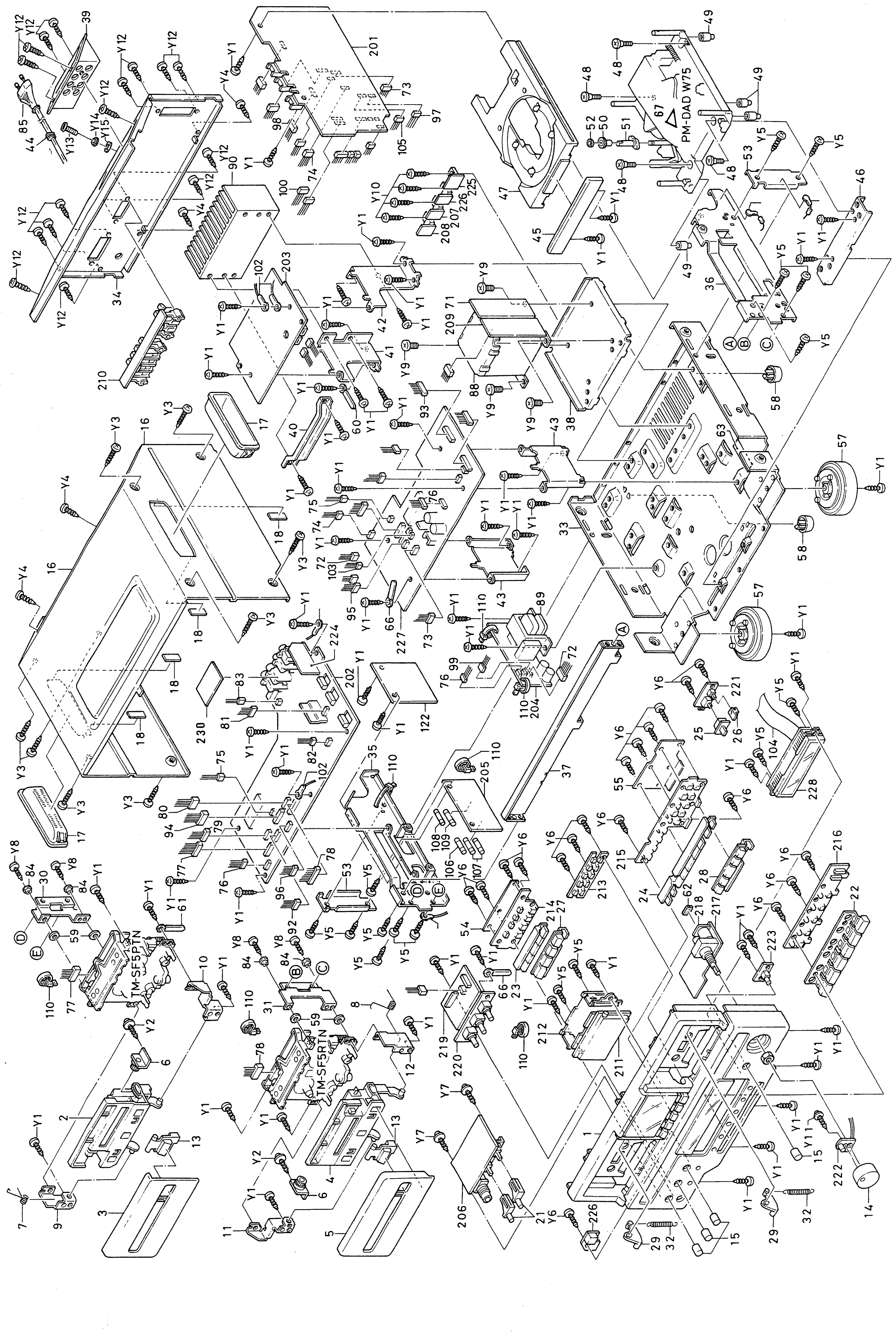
Pos.-Nr. Ref. No. No. de pos.	Bestell-Nr. Part No. No. de comm.	Pos.-Nr. Ref. No. No. de pos.	Bestell-Nr. Part No. No. de comm.
1	6134 51 01		
2	6136 12 65		
3	6136 12 66		
3	6136 12 71 *		
4	6136 12 67		
5	6136 12 68		
6	7525 12 69		
7	7358 45 24		
8	7358 45 25		
9	8681 46 70		
10	8681 46 71		
11	8681 46 72		
12	8681 46 73		
13	6318 45 19		
14	6328 06 03		
15	6328 06 04		
16	6123 09 67		
17	6341 49 75		
21	6318 45 20		
22	6318 45 21		
23	6318 45 22		
24	6318 45 23		
25	6328 06 02		
26	6318 45 24		
27	6318 45 25		
28	6318 45 26		
29	8681 46 77		
30	8681 46 78		
31	8681 46 79		
32	7358 45 26		
33	6123 09 68		
34	6123 09 69		
34	6123 88 01 *		
39	8681 46 74		
44	8681 09 85		
45	8681 46 75		
47	8681 46 76		
50	7525 12 30		
51	7525 12 31		
57	6273 40 43		
58	6273 40 44		

* für/for/pour CD 8550 LUXOR

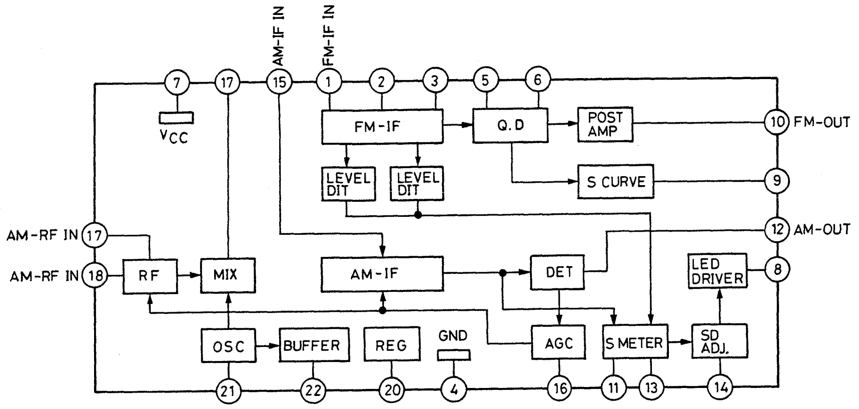
EXPLODED VIEW (CABINET & CHASSIS)



IC BLOCK DIAGRAM

<TUNER SECTION>

IC201 LA1265 (Tuner System)


AM-IF IN
FM-IF IN
7
17
15
1
2
3
5
6
VCC
FM-IF
Q.D
POST AMP
10 FM-OUT
LEVEL DIT
LEVEL DIT
S CURVE
9
12 AM-OUT
AM-RF IN 17
AM-RF IN 18
RF
MIX
AM-IF
DET
LED DRIVER
8
OSC
BUFFER
REG
GND
AGC
S METER
SD ADJ.
21
22
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16
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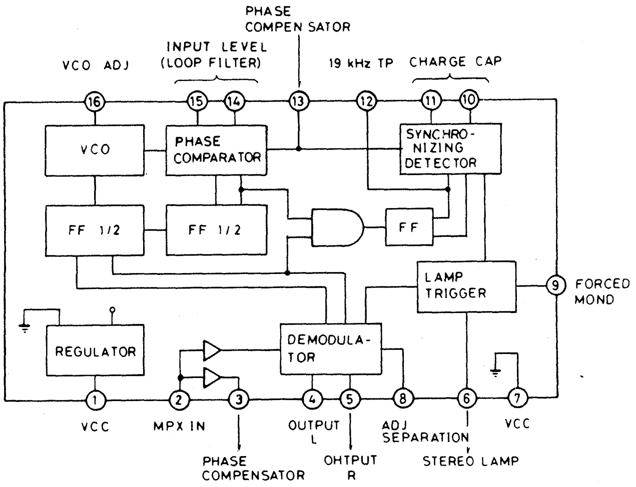
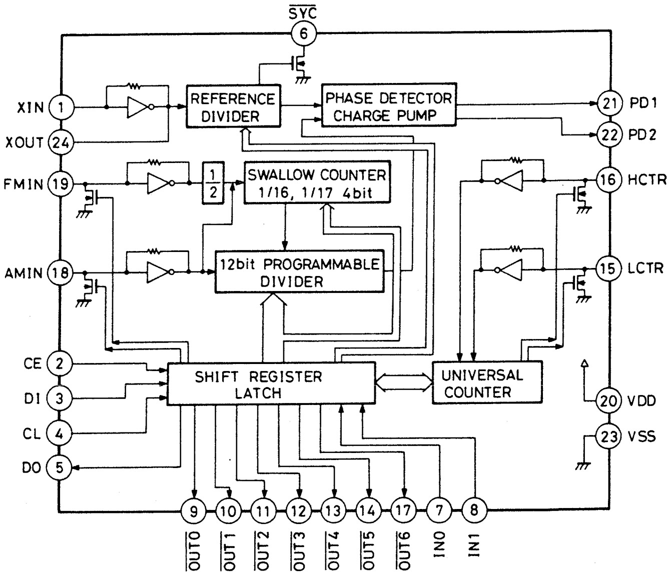
14

IC301 LA3361 (PLL FM MPX. Stereo Demodulator)


PHASE COMPEN SATOR
INPUT LEVEL (LOOP FILTER)
VCO ADJ
19 kHz TP
CHARGE CAP
16
15
14
13
12
11
10
VCO
PHASE COMPARATOR
SYNCHRO-NIZING DETECTOR
FF 1/2
FF 1/2
FF
LAMP TRIGGER
9 FORCED MOND
REGULATOR
DEMODULA-TOR
1
2
3
4
5
8
6
7
VCC
MPX IN
OUTPUT L
ADJ SEPARATION
VCC
PHASE COMPENSATOR
OHTPUT R
STEREO LAMP

IC403 LC7218 (PLL Frequency Synthesizer for Electronic Tuning)



LC7218 Pin Description

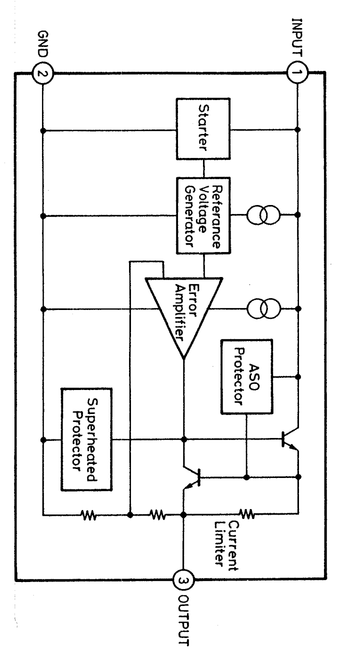
Pin No.	Pin Name	I/O	Function
1 24	XIN XOUT	I/O	· Crystal resonator (7.2MHz) is connected.
2	CE	I	· High level signals are input during serial data input (DI) or output (DO).
3	DI	I	· Serial data transferred from controller to LC7218 is input to this pin. · A total of 36 bits of data should be input for initialization.
4	CL	I	· Data is synchronized by this clock signal during serial data input (DI) or output (DO).
5	DO	O (N-CH open drain)	· Serial data transferred from the controller to LC7218 is output at this pin. · By synchronizing it with CL, 28 bits of the contents of the internal shift register can be output.
6	SYC	(N-CH open drain)	· Controller clock is output at this pin, 400kHz (66% duty) is output after power-on.
7 8	IN0 IN1	O	· Contents of input ports IN0 and IN1 are converted from parallel to serial form and are output at output pin DO.
9 10 11 12 13 14 17	OUT0 OUT1 OUT2 OUT3 OUT4 OUT5 OUT6	O	· Bits O_0 to O_6 of serial data, transferred from the controller, are latched, and the data is inverted and output in parallel. · Time base (8Hz) for the clock can be output at OUT0 (while TB=1). · OUT1 and OUT2 are complementary outputs. · OUT0, OUT3, OUT4, OUT5, and OUT6 are N-ch open drain outputs (withstand voltage: 13V).
15	LCTR	I	· LCTR is selected by specifying serial data input: SC = 0. · When serial data input: SF = 1 is specified, · Signals are not sent to the internal 1/8 divider, but are directly transmitted to the universal counter. · When serial data input: SF = 0 is specified, · Period measurement mode is selected. · Either a 1- or 2-cycle measuring period can be selected. When a 2-cycle period is selected, the input frequency range is between 2Hz and 20kHz. (GT = 1/0: 2/1 cycle) · Result is output as in HCTR.
16	HCTR	I	· HCTR is selected by specifying serial data input: SC = 1. · When HCTR is selected, either 120ms or 60ms can be specified as the measuring time in the frequency measurement mode. (GT = 1/0: 120/60ms) · Result can be output at MSB of the universal counter via output pin DO.
18	AMIN	I	· AMIN is selected by specifying serial data input: DV = 0. · When serial data input: SP = 1 is specified. · Signals are not sent to built-in prescaler (1/2), but are directly transferred to swallow counter. · When serial data input: SP = 0 is specified, · Signals are directly transferred to a 12-bit programmable divider.
19	FMIN	I	· FMIN is selected by specifying serial data input: DV = 1. · Signals are sent to the swallow counter via built-in prescaler (1/2).
20	VDD	–	· Power is supplied to LC7218 via this pin. During PLL operation, 4.5 to 6.5V is applied.
21 22	PD1 PD2	3-state	· These are output pins for PLL charge pump signals. If the local oscillation signal frequency divided by N is higher than the reference frequency, high level signals are output at PD1 and PD2; if it is lower than the reference frequency, low level signals are output. If it is the same as the reference frequency, the PD1 and PD2 are brought to floating state.

Pin Function of IC601 (LC66508)

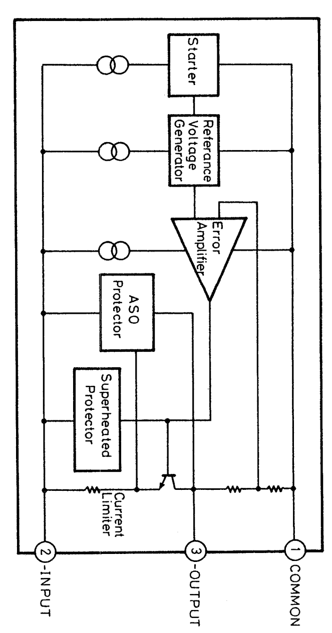
Pin No.	Pin Name	Description	Low	High	I/O
1	PDOWN	Power Down	ON		I
2	DATA	Connect to +5V through the resistor, 10K ohm			
3	CLK	Gnd			
4	POWER	Connect to +5V through the resistor, 10K ohm			
5	PMUTE	Play Mute control	OFF	ON	O
6	RMUTE	Rec Mute control	OFF	ON	O
7	PLAYAB	A Mecha, B Mecha play signal control	PLAYA	PLAYB	O
8	AMSSIN	AMSS signal input	non-signal,	signal	I
9	A-FFLED	Gnd			
10	A-REWLED	Connect to +5V through the resistor, 10K ohm			
11	B-FFLED	Gnd			
12	B-REWLED	Connect to +5V through the resistor, 10K ohm			
13	A-RLED	A Mecha, Reverse LED	ON		O
14	B-RLED	B Mecha, Reverse LED	ON		O
15	A-ANTREC	A-ANTREC SW for B Mecha Forward	REC	ANTREC	I
16	B-ANTREC	B-ANTREC SW for B Mecha Reverse	REC	ANTREC	I
17	B-REEL	B Mecha Reel Pulse			I
18	B-PACK	Detecting terminal for cassette (TAPE B Mecha)	Being	Not	I
19	B-FF/REWSW	Detecting terminal for FF, REW mode in B Mech	FF	REW	I
20	B-PLAYSW	Detecting terminal for play mode (B Mecha)	PLAY		I
21	B-P2	B Mecha FF, REW Plunger control	ON		O
22	B-P1	B Mecha Play Plunger control	ON		O
23	B-MOTOR	B Mecha Motor switching	ON		O
24	B-HIGH	B Mecha Motor speed switching	Low	High	O
25	A/BLED	Open			
26	DUBLED	Normal speed dubbing LED	ON		O
27	HDUB	High speed dubbing LED	ON		O
28	IRIND	Open			
29	A-REEL	A Mecha, Reel pulse			I
30	TEST	Gnd			
31	VSS	Gnd			
32	OSC1	Pin for connection to 4.19 MHz OSC			I
33	OSC2	Pin for connection to 4.19 MHz OSC			O
34	RESET	Input terminal of system reset			I
35	A-PACKSW	Detecting terminal for cassette, (TAPE A Mecha)	Being,	Not	I
36	A-FF/REWSW	Detecting terminal for FF, REW mode (A Mecha)	FF	REW	I
37	A-PLAYSW	Detecting terminal for play mode (A Mecha)	PLAY		I
38	A-P2	A Mecha, FF. REW Plunger	ON		O
39	A-P1	A Mecha, Play Plunger	ON		O
40	A-MOTOR	A Mecha, Motor switching	ON		O
41	A-HIGH	A Mecha, Motor speed switching	Low	High	O
42	A-FLED	A Mecha, Forward LED,	ON		O
43	B-FLED	B Mecha, Forward LED	ON		O
44	REC LED	B Mecha, Record LED	ON		O
45	MOTELED	B Mecha, Record mute LED	ON		O
46	KEY1	KEY1 FPLAY, A Mecha Forward Play			I
47	KEY2	KEY2 RPLAY, A Mecha Reverse Play			I
48	KEY3	KEY1, 2 STOP, A Mecha Stop KEY1, 3 FF. A Mecha Fast Forward KEY2, 3 REW, A Mecha Rewind			I
49	KEY8	KEY5, 6 REW, B Mecha Rewind KEY7 REC, B Mecha Record KEY8 MUTE, B Mecha Record mute			I
50	KEY4	KEY4 FPLAY, B Mecha Forward Play			I
51	KEY5	KEY5 RPLAY, B Mecha Reverse Play			I
52	KEY6	KEY4, 5 STOP, B Mecha Stop			I
53	KEY7	KEY4, 6 FF, B Mecha Fast Forward			I
54	DIR	Direction SW, Low ⇄, Mid ↷/↷, Hi ↻ ↺			I
55	TIMER	TIMER standby SW, Low-PLAY, Mid-OFF, Hi-REC			I
56	KEY9	KEY1, 9 DUB Normal speed dubbing KEY3, 9 HDUB High speed dubbing KEY4, 9 CDUB Normal speed CD dubbing KEY6, 9 HCDUB High speed CD dubbing			I
57	KEY OUT	Switching to segment diodes and KEY IN			O
58	RESET	Counter reset SW			
59	IRIN	Remocon data signal			I
60	DUBIN	Dubbing control input			I
61	CSTOP	CALL STOP input			I
62	DUBOUT	Dubbing control			O
63	AF	Auto Function control			O
64	VDD	Power source			

IC BLOCK DIAGRAM

IC601 L78M05 (5V 3-Terminal Constant Voltage Regulated Power Supply)

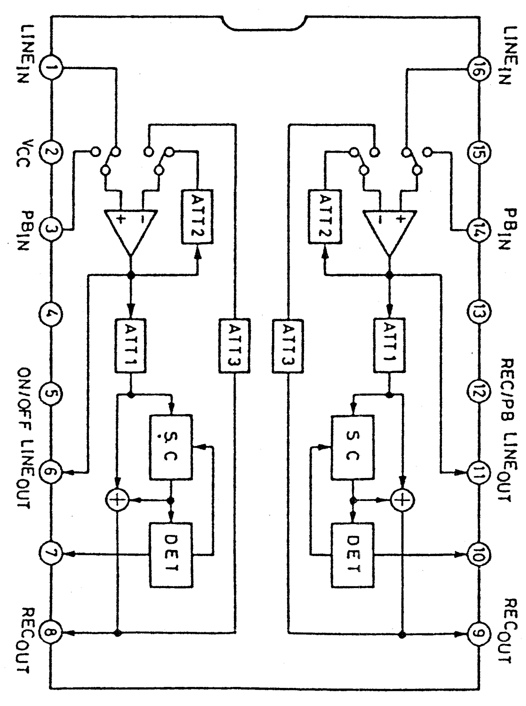

INPUT ①
GND ②
③ OUTPUT
Starter
Referance Voltage Generator
Error Amplifier
ASO Protector
Superheated Protector
Current Limiter

IC602 L79M05 (–5V 3-Terminal Constant Voltage Regulated Power Supply)

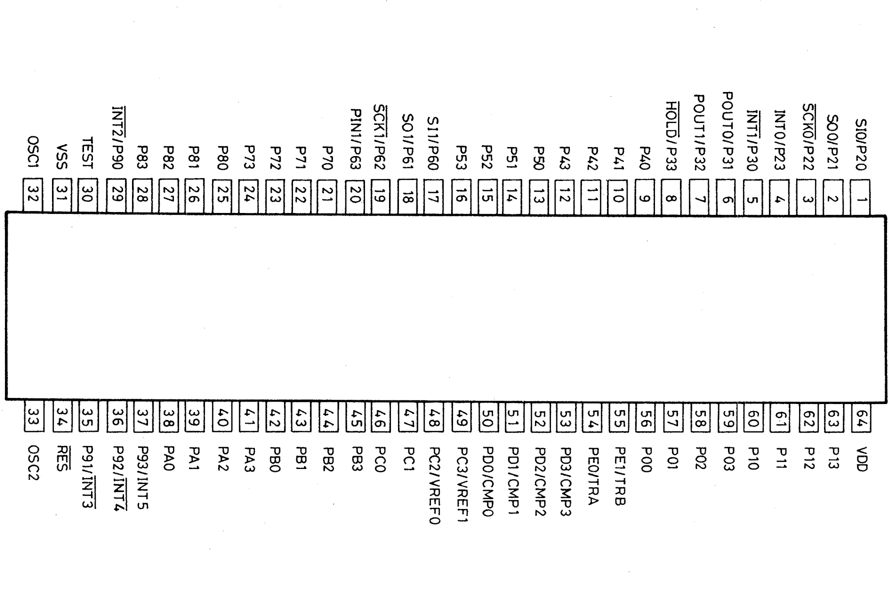

① COMMON
③ -OUTPUT
② -INPUT
Starter
Referance Voltage Generator
Error Amplifier
ASO Protector
Superheated Protector
Current Limiter

< DECK SECTION >

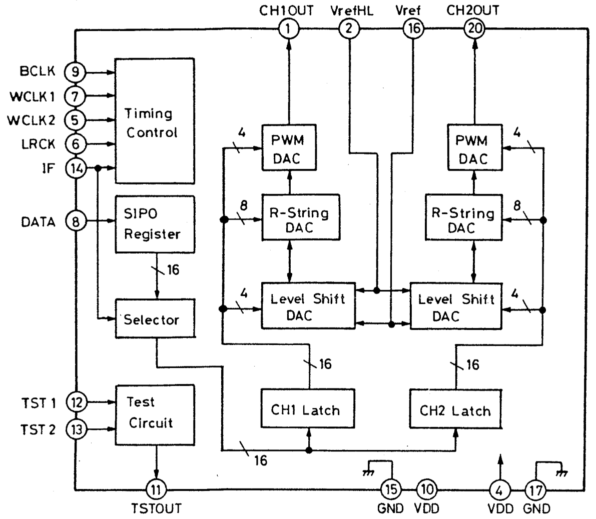
IC501 CXA1101 (Dolby B-TYPE Noise Reduction)


LINE$_{IN}$
PB$_{IN}$
REC/PB LINE$_{OUT}$
REC$_{OUT}$
V_{CC}
ON/OFF LINE$_{OUT}$
ATT1
ATT2
ATT3
S C
DET

IC601 LC66508 (4-BIT C-MOS 1-CHIP Microprocessor)


SI0/P20 1
SO0/P21 2
SCK0/P22 3
INT0/P23 4
INT1/P30 5
POUT0/P31 6
POUT1/P32 7
HOLD/P33 8
P40 9
P41 10
P42 11
P43 12
P50 13
P51 14
P52 15
P53 16
SI1/P60 17
SO1/P61 18
SCK1/P62 19
PIN1/P63 20
P70 21
P71 22
P72 23
P73 24
P80 25
P81 26
P82 27
P83 28
INT2/P90 29
TEST 30
VSS 31
OSC1 32
64 VDD
63 P13
62 P12
61 P11
60 P10
59 P03
58 P02
57 P01
56 P00
55 PE1/TRB
54 PE0/TRA
53 PD3/CMP3
52 PD2/CMP2
51 PD1/CMP1
50 PD0/CMP0
49 PC3/VREF1
48 PC2/VREF0
47 PC1
46 PC0
45 PB3
44 PB2
43 PB1
42 PB0
41 PA3
40 PA2
39 PA1
38 PA0
37 P93/INT5
36 P92/INT4
35 P91/INT3
34 RES
33 OSC2

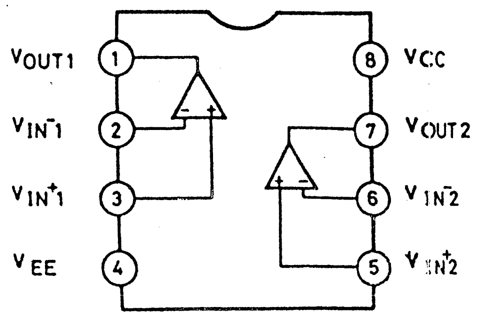
IC501 LC7880 (16-bit D-A Converter for CD)


CH1OUT
VrefHL
Vref
CH2OUT
BCLK
WCLK1
WCLK2
LRCK
IF
DATA
Timing Control
SIPO Register
Selector
PWM DAC
R-String DAC
Level Shift DAC
CH1 Latch
CH2 Latch
Test Circuit
TST1
TST2
TSTOUT
GND
VDD
VDD
GND
4
8
16

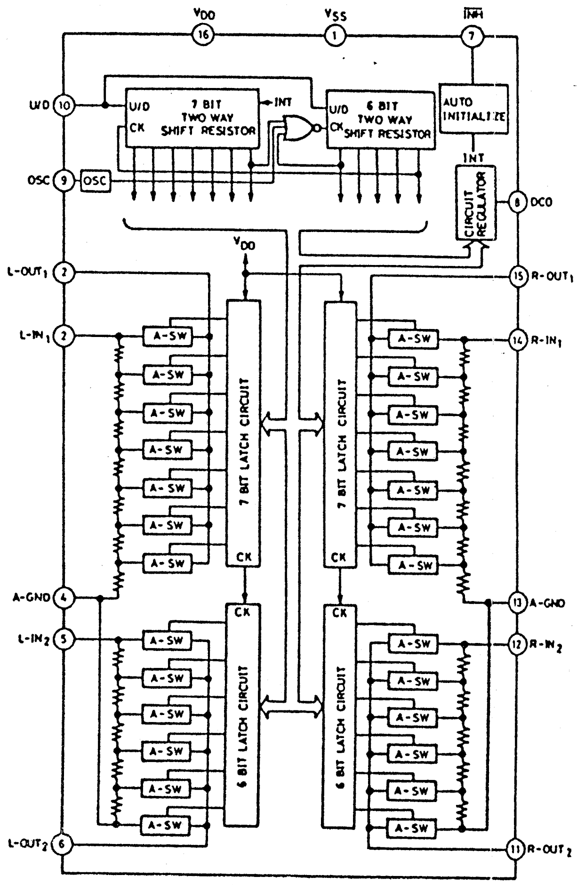
Pins Functions of IC501 (LC7880)

Pin No.	Pin name (Symbol)	Description
1	CH1OUT	Output Terminal of CH-1.
2	VrefH	Input Terminal of Reference Voltage "H".
3	NC	No Connection
4	VDD	+5V Power Supply Terminal.
5	WCLK2	Input Terminal of Word-Clock 2. When IF is in "L", internal signal for latching CH-1 data of digital signal is made by using trailing edge WCLK2. When IF is in "H", it needs WCLK2 to "L".
6	LRCK	Input Terminal of LR Clock. Indicates CH-1 and CH-2 of input digital audio data : indicate CH-1 when LRCK is in "H". indicate CH-2 when LRCK is in "L".
7	WCLK1	Input Terminal of Word-Clock 1. When IF is in "L", internal signal for latching CH-2 data of digital signal is made by using trailing edge of WCLK1. When IF is in "H", internal signal for latching CH-1 and CH-2 data of digital signal is made by trailing edge of WCLK1.
8	DATA	Input Terminal of Digital Audio Data. When IF is in "L", digital audio data is input in bit serial from LSB. When IF is in "H", digital audio data is input in bit serial from MSB.
9	BCLK	Bit-Clock Terminal. This clock is for reading digital audio data into LSI in bit serial and is for PWMDAC.
10	VDD	+5V Power Supply Terminal.
11	TSTOUT	Output Terminal for Testing. Ordinarily, leave this terminal open.
12	TST1	Input Terminal for Testing. Ordinarily, ground these terminals.
13	TST2	Input Terminal for Testing. Ordinarily, ground these terminals.
14	IF	Interface Select Terminal. When IF is in "L", digital audio data is input from LSB side. When IF is in "H", digital audio data is input from MSB side.
15	GND	Ground Terminal
16	VrefL	Input Terminal of Reference Voltage "L".
17	GND	Ground Treminal
18	NC	No Connection
19	NC	No connection
20	CH2OUT	Output Terminal of CH-2.

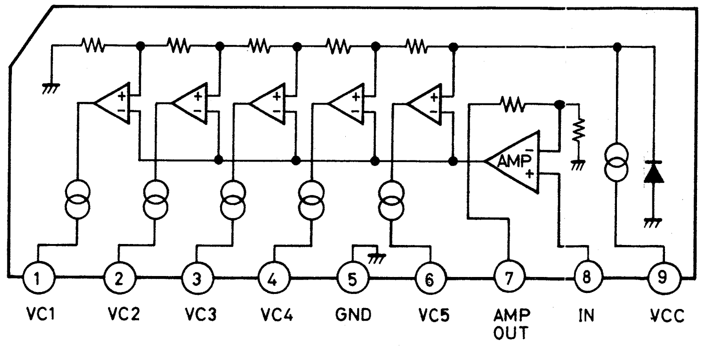
IC503, 504, 505 LA6458DS (Dual Operational Amp.)


VOUT1
VIN-1
VIN+1
VEE
VCC
VOUT2
VIN-2
VIN+2
1
2
3
4
5
6
7
8

IC506 TC9154 AP (Electronic Volume)


VDD
VSS
INH
U/D
OSC
7 BIT TWO WAY SHIFT RESISTOR
6 BIT TWO WAY SHIFT RESISTOR
AUTO INITIALIZE
INT
CK
CIRCUIT REGULATOR
OCO
L-OUT1
L-IN1
A-GND
L-IN2
L-OUT2
R-OUT1
R-IN1
A-GND
R-IN2
R-OUT2
A-SW
7 BIT LATCH CIRCUIT
6 BIT LATCH CIRCUIT

IC507 LB1403 (Level Meter)

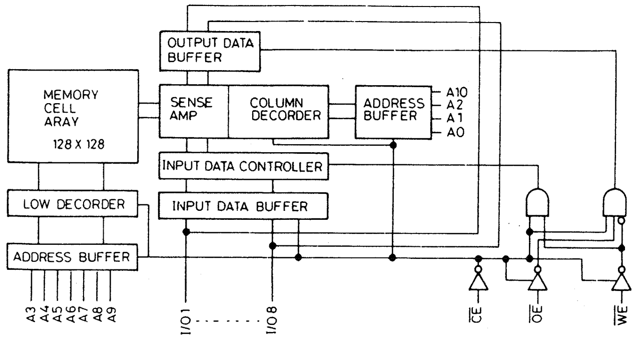

AMP
1
2
3
4
5
6
7
8
9
VC1
VC2
VC3
VC4
GND
VC5
AMP OUT
IN
VCC

IC BLOCK DIAGRAM

Pin No	Pin Name	I/O	Functions	
25	TEST3	I	–	Test pin. Normally not connected.
26	EMPH	O	–	De-emphasis is necessary when HIGH.
27	DFOFF	I	–	ON/OFF switch for digital filter. No filtering when HIGH.
28	DSPOFF	I	–	Test pin Normally not connected.
29	SMP2	O	*3	*3 Signal output to DAC and signal for L/R switching and sample hold. *4 +5V *5 Signal output for CDROM *6 CDROM sync signal
30	LRCLK	O	*3	
31	VDD	–	*4	
32	SMP3	O	*3	
33	SMP1	O	*3	
34	DFOUT	O	*3	
35	DACLK	O	*3	
36	DFIN	I/O	*5	
37	LRSY	O	*6	
38	MSBF	I	*3	
39	CK2	O	–	2.1609MHz
40	AD10	O	*7	*7 RAM address output *8 Output state when $\overline{\text{WE}}$ = L and input state when $\overline{\text{WE}}$ = H. $\overline{\text{OE}}$ is for input/outptu control.
41	$\overline{\text{OE}}$	O	*8	
42	$\overline{\text{WE}}$	O	*8	
43	AD9	O	*7	
44	AD8	O	*7	
45	AD7	O	*7	
46	AD6	O	*7	
47	AD5	O	*7	
48	AD4	O	*7	
49	AD3	O	*7	
50	AD2	O	*7	
51	AD1	O	*7	
52	AD0	O	*7	
53	DB7	I/O	*9	*9 DB7 to DB0: connected to RAM data pins. *10 GND
54	DB6	I/O	*9	
55	DB5	I/O	*9	
56	Vss	–	*10	
57	DB4	I/O	*9	
58	DB3	I/O	*9	
59	DB2	I/O	*9	
60	DB1	I/O	*9	
61	DB0	I/O	*9	

Pin No.	Pin Name	I/O	Functions	
62	TEST4	I	–	Test pin. Normally not connected.
63	TEST5	I	–	
64	IOFF	I	–	For CD ROM. HIGH time interpolation and holding of previous value not performed.
65	EFLG	O	–	C1/C2 1-level and 2-level error correction
66	PW	O	–	PWSY is SYNC combining main and sub and change from HIGH to LOW is taken externally. The P, Q, R, S, T, U, V, and W subcodes are read by sending 8 clock pulses to SBCK.
67	PWSY	O	–	
68	SBCK	I	–	
69	FSX	O	–	7.35kHz sync signal output
70	WRQ	O	*11	*11 WRQ goes HIGH when data of subcode Q passes CRC check. This is taken externally and the data from SQOUT is read by sending $\overline{\text{CQCK}}$. When data is required with LSB first, M/L is driven LOW. After the microprocessor sets RWC to HIGH, the command is given by output synchronized with the $\overline{\text{CQCK}}$ command data. *12 Goes LOW once when power is turned on.
71	RWC	I	*11	
72	SQOUT	O	*11	
73	VDD	–	*11	
74	COIN	I	*11	
75	$\overline{\text{CQCK}}$	I	*11	
76	$\overline{\text{RST}}$	I	*12	
77	M/L	I	*11	
78	Vss	–	–	GND
79	XIN	I	–	Pin for connection to 8.6436MHz crystal oscillator
80	XOUT	O	–	

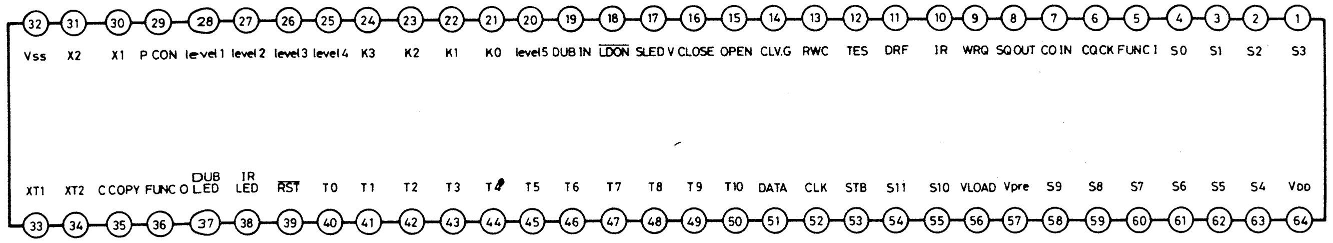
IC402 LC3517AS-15 (C MOS 8-BITX2048-WORD STATIC RAM)


OUTPUT DATA BUFFER
MEMORY CELL ARAY
128 X 128
SENSE AMP
COLUMN DECORDER
ADDRESS BUFFER
A10
A2
A1
A0
INPUT DATA CONTROLLER
LOW DECORDER
INPUT DATA BUFFER
ADDRESS BUFFER
A3
A4
A5
A6
A7
A8
A9
I/O1
I/O8
CE
OE
WE

TERMINAL NAME	TERMINAL DESCRIPTION
A0~A10	ADDRESS INPUT
I/O1~I/O8	DATA INPUT/OUTPUT
$\overline{\text{CE}}$	CHIP ENABLE INPUT
$\overline{\text{WE}}$	WRITE ENABLE INPUT
$\overline{\text{OE}}$	OUTPUT ENABLE INPUT
Vcc	+5V POWER SOURCE
GND	GROUND

IC BLOCK DIAGRAM

IC301 μPD75216ACW (CD Microprocessor)


32 Vss
31 X2
30 X1
29 P CON
28 level 1
27 level 2
26 level 3
25 level 4
24 K3
23 K2
22 K1
21 K0
20 level5
19 DUB IN
18 LDON
17 SLED V
16 CLOSE
15 OPEN
14 CLV.G
13 RWC
12 TES
11 DRF
10 IR
9 WRQ
8 SQOUT
7 COIN
6 CQCK
5 FUNC 1
4 S0
3 S1
2 S2
1 S3
33 XT1
34 XT2
35 C COPY
36 FUNC O
37 DUB LED
38 IR LED
39 RST
40 T0
41 T1
42 T2
43 T3
44 T4
45 T5
46 T6
47 T7
48 T8
49 T9
50 T10
51 DATA
52 CLK
53 STB
54 S11
55 S10
56 VLOAD
57 Vpre
58 S9
59 S8
60 S7
61 S6
62 S5
63 S4
64 VDD

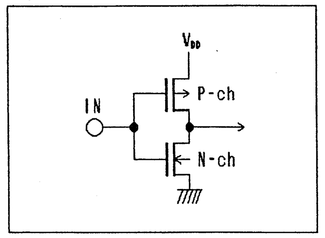
Pin Function of IC301 (μPD75216ACW)

Pin No.	Pin Name	I/O	Description	Schematics I/O
1	S3	O	FL display signal & key scan output	OUT–3
2	S2	O	FL display signal & key scan output	OUT–3
3	S1	O	FL display signal & key scan output	OUT–3
4	S0	O	FL display signal & key scan output	OUT–3
5	FUNC–1	I	Function input	IN–2
6	CQCK	O	LC7860N interface (clock)	OUT–1
7	COIN	O	LC7860N interface (SUBQ data)	OUT–1
8	SQOUT	I	LC7860N interface (command data)	IN–2
9	WRQ	I	LC7860N interface (SUBQ trigger)	IN–2
10	IR	I	Remocon signal input	IN–2
11	DRF	I	Detecting terminal of RF signal	IN–2
12	TES	I	Track count terminal	IN–2
13	RWC	O	LC7860N interface (data latch)	OUT–1
14	CLV–G	O	CLV Gain switching	OUT–1
15	OPEN	O	SLED Motor (Tray drive) control	OUT–1
16	CLOSE	O	SLED Motor (Tray drive) control	OUT–1
17	SLED V	O	Drive voltage control (Sled Motor)	OUT–1
18	LD ON	O	Laser switching	OUT–1
19	DUB IN	I	Dubbing input (from DECK)	IN–1
20	LEVEL5	I	Detecting terminal of peak level	IN–1
21	KEY0	I	KEY Input	IN–3
22	KEY1	I	KEY Input	IN–3
23	KEY2	I	KEY Input	IN–3
24	KEY3	I	KEY Input	IN–3
25	LEVEL4	I	Detecting terminal of peak level	IN–1
26	LEVEL3	I	Detecting terminal of peak level	IN–1
27	LEVEL2	I	Detecting terminal of peak level	IN–1
28	LEVEL1	I	Detecting terminal of peak level	IN–1
29	PCON	O	Power control (Power ON: Low)	OUT–1
30	X1	I	Pin for connection to 4.19MHz OSC	
31	X2	O	Pin for connection to 4.19MHz OSC	
32	Vss		Gnd	

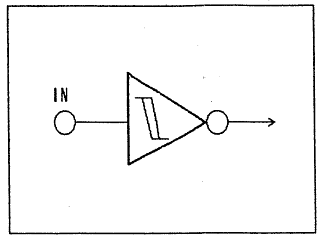
Pin No.	Pin Name	I/O	Description	Schematics I/O
33	XT1		Connect to Gnd	
34	XT2		Open	
35	C–COPY	O	Computer copy signal (for DECK)	OUT–1
36	FUNC–O	O	Auto Function signal (for DECK/AMP)	OUT–1
37	DUB LED	O	Computer copy LED drive (ON; Low)	OUT–1
38	P53	O	Open	
39	RESET	I	Reset signal input	
40	T0	O	FL display digit signal output	OUT–3
41	T1	O	FL display digit signal output	OUT–3
42	T2	O	FL display digit signal output	OUT–3
43	T3	O	FL display digit signal output	OUT–3
44	T4	O	FL display digit signal output	OUT–3
45	T5	O	FL display digit signal output	OUT–3
46	T6	O	FL display digit signal output	OUT–3
47	T7	O	FL display digit signal output	OUT–3
48	T8	O	FL display digit signal output	OUT–3
49	T9	O	FL display digit signal output	OUT–3
50	T10	O	FL display digit signal output	OUT–3
51	EVR DATA	O	Electrical volume IC control	OUT–2
52	EVR CLK	O	Electrical volume IC control	OUT–2
53	EVR STB	O	Electrical volume IC control	OUT–2
54	S11	O	FL display segment signal output	OUT–3
55	S10	O	FL display segment signal output	OUT–3
56	VLOAD		Power source to pull down resitor of FL display	
57	VPRE		Power source to output buffer of FL display	
58	S9	O	FL display segment signal output	OUT–3
59	S8	O	FL display segment signal output	OUT–3
60	S7	O	FL display segment signal output	OUT–3
61	S6	O	FL display segment signal & key scan output	OUT–3
62	S5	O	FL display segment signal & key scan output	OUT–3
63	S4	O	FL display segment signal & key scan output	OUT–3
64	VDD		+5V	

* Refer to I/O circuit block next page about output format.

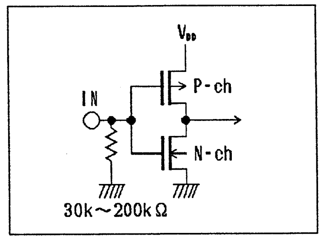
Input 1


V_{DD}
IN
P-ch
N-ch

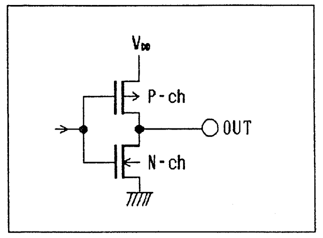
Input 2



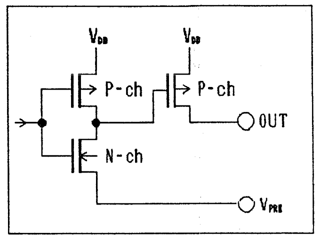
Input 3


V_{DD}
IN
P-ch
N-ch
30k～200kΩ

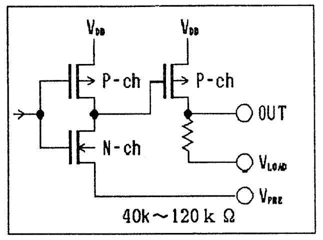
Output 1


V_{DD}
P-ch
N-ch
OUT

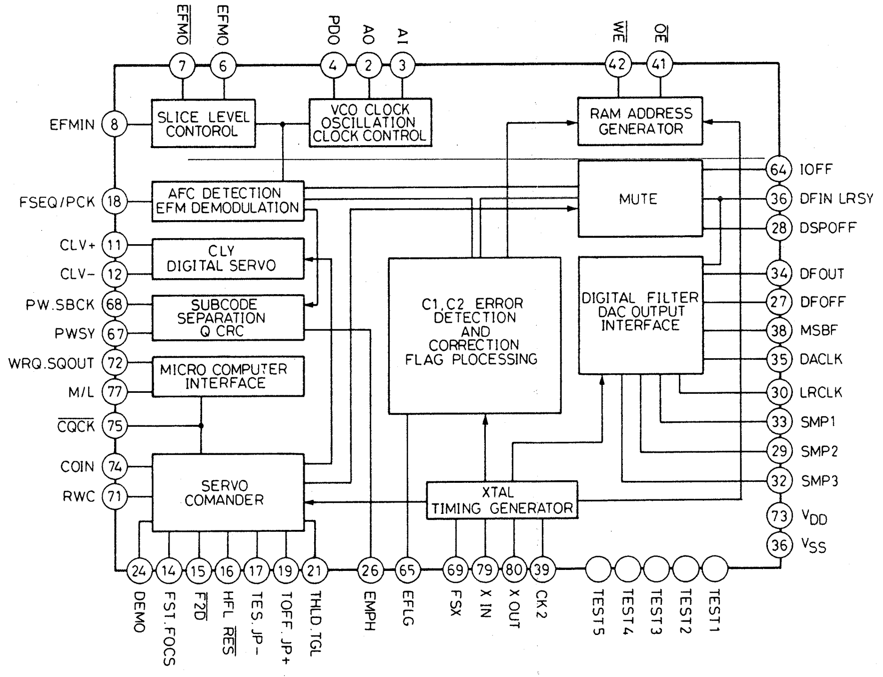
Output 2


V_{DD}
V_{DD}
P-ch
P-ch
N-ch
OUT
V_{PRE}

Output 3


V_{DD}
V_{DD}
P-ch
P-ch
N-ch
OUT
V_{LOAD}
V_{PRE}
40k～120k Ω

IC401 IC7860N (CD Digital Signal Processor)


EFMO
EFMO
PDO
AO
AI
WE
OE
7
6
4
2
3
42
41
EFMIN 8
SLICE LEVEL CONTOROL
VCO CLOCK OSCILLATION CLOCK CONTROL
RAM ADDRESS GENERATOR
64 IOFF
FSEQ/PCK 18
AFC DETECTION EFM DEMODULATION
MUTE
36 DFIN LRSY
28 DSPOFF
CLV+ 11
CLV– 12
CLY DIGITAL SERVO
34 DFOUT
PW.SBCK 68
PWSY 67
SUBCODE SEPARATION Q CRC
C1,C2 ERROR DETECTION AND CORRECTION FLAG PLOCESSING
DIGITAL FILTER DAC OUTPUT INTERFACE
27 DFOFF
38 MSBF
35 DACLK
WRQ.SQOUT 72
M/L 77
MICRO COMPUTER INTERFACE
30 LRCLK
CQCK 75
33 SMP1
29 SMP2
COIN 74
RWC 71
SERVO COMANDER
XTAL TIMING GENERATOR
32 SMP3
73 VDD
36 VSS
24 DEMO
14 FST.FOCS
15 F2D
16 HFL RES
17 TES.JP–
19 TOFF.JP+
21 THLD.TGL
26 EMPH
65 EFLG
69 FSX
79 X IN
80 X OUT
39 CK2
TEST5
TEST4
TEST3
TEST2
TEST1

Pin Function of IC401 (LC7860N)

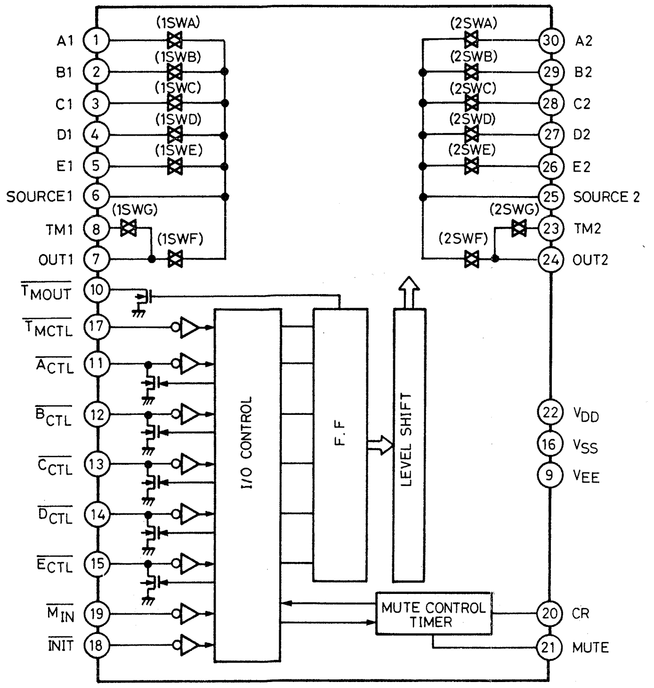
Pin No	Pin Name	I/O	Functions	
1	TEST1	I	–	Test pin. Normally not connected.
2	AO	O	–	VCO is generated by connecting resonance circuit between AI and AO. (8.6436MHz) is phase output with EFM signal, and is set to increase frequency when +".
3	AI	I	–	
4	PDO	O	–	
5	Vss	–	–	GND
6	EFMO	O	–	1 to 2Vpp HF signal is input to EFMIN. Output from EFMO and BFMO passes through amplitude limiter and reverse phase EFM signal is obtained from both. This performs slice level control.
7	$\overline{\text{EFMO}}$	O	–	
8	EFMIN	I	–	
9	TEST2	I	–	Test pin. Normally not connected.
10	VDD	–	–	+5V
11	CLV+	O	–	Disk motor control output
12	CLV–	O	–	

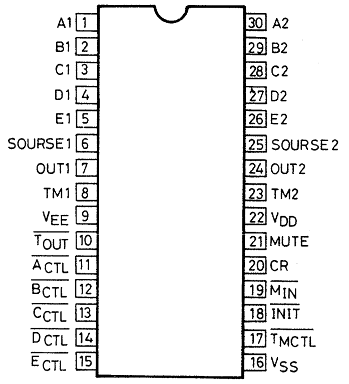
Pin No.	Pin Name	I/O	Functions	
13	FOCS	O	–	Focus servo is off when FOCS is HIGH. The lens is lowered by FST and then FST is HIGH, the lens is gradually pulled up. FOCS is reset when FZD is generated. For focus-in.
14	FST	O	–	
15	FZD	I	–	
16	HFL	I	*1	*1 Kick pulses, JP+ and JP–, are generated according to track jump command. A jump of the prescribed number of tracks is (1, 4, 16 64). *2 When 4.3218MHz PCK monitor terminal/DEMO is HIGH both SYNC detected from EFM signal and SYNC of counter are the same at HIGH.
17	TES	I	*1	
18	FSEQ/PCK	O	*2	
19	TOFF	O	*1	
20	TGL	O	*1	
21	THLD	O	*1	
22	JP+	O	*1	
23	JP–	O	*1	
24	DEMO	I	–	Set and sount output adjustment pin function.

IC BLOCK DIAGRAM

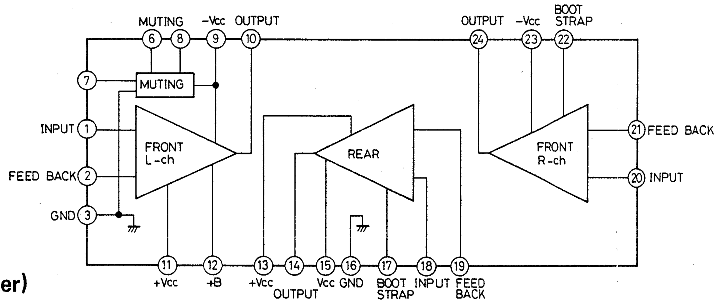
<AMP. SECTION>

IC701 LC7818 (2-Pole 4-Position Analog Function Switch)

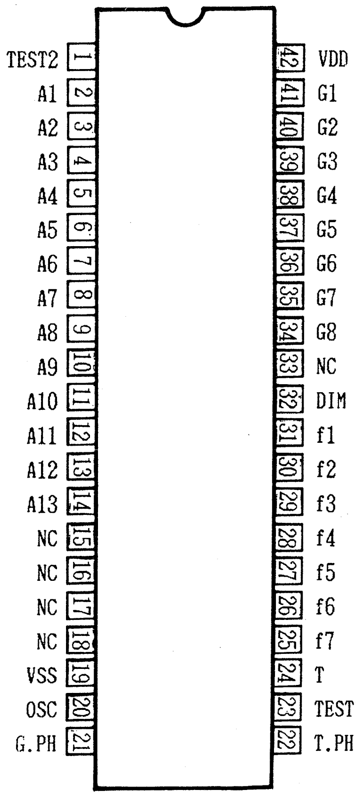

A1 1
B1 2
C1 3
D1 4
E1 5
SOURCE1 6
TM1 8
OUT1 7
TMOUT 10
TMCTL 17
ACTL 11
BCTL 12
CCTL 13
DCTL 14
ECTL 15
MIN 19
INIT 18
(1SWA)
(1SWB)
(1SWC)
(1SWD)
(1SWE)
(1SWG)
(1SWF)
(2SWA)
(2SWB)
(2SWC)
(2SWD)
(2SWE)
(2SWG)
(2SWF)
30 A2
29 B2
28 C2
27 D2
26 E2
25 SOURCE 2
23 TM2
24 OUT2
I/O CONTROL
F.F
LEVEL SHIFT
22 VDD
16 VSS
9 VEE
MUTE CONTROL TIMER
20 CR
21 MUTE

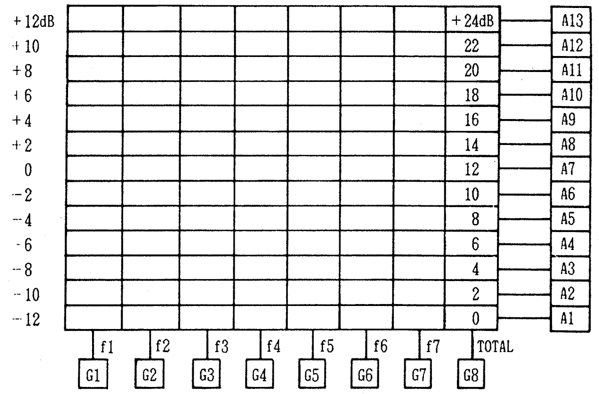

A1 1
B1 2
C1 3
D1 4
E1 5
SOURSE1 6
OUT1 7
TM1 8
VEE 9
TOUT 10
ACTL 11
BCTL 12
CCTL 13
DCTL 14
ECTL 15
30 A2
29 B2
28 C2
27 D2
26 E2
25 SOURSE2
24 OUT2
23 TM2
22 VDD
21 MUTE
20 CR
19 MIN
18 INIT
17 TMCTL
16 VSS

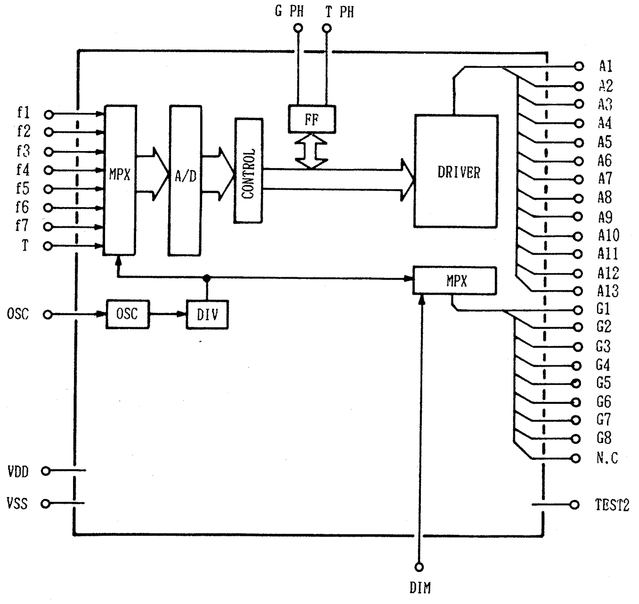
IC705 STK4157II (3 Channel AF Power Amp.)

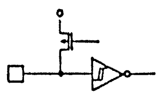
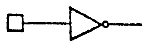
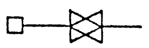
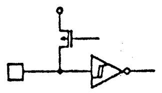
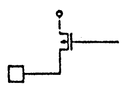

MUTING
-Vcc
OUTPUT
6
8
9
10
OUTPUT
-Vcc
BOOT STRAP
24
23
22
7
MUTING
INPUT 1
FEED BACK 2
GND 3
FRONT L-ch
REAR
FRONT R-ch
21 FEED BACK
20 INPUT
11
12
13
14
15
16
17
18
19
+Vcc
+B
+Vcc
OUTPUT
Vcc GND
BOOT STRAP
INPUT
FEED BACK

IC706 LC7566 (Flourecent Display Driver of Spectrum Analizer)

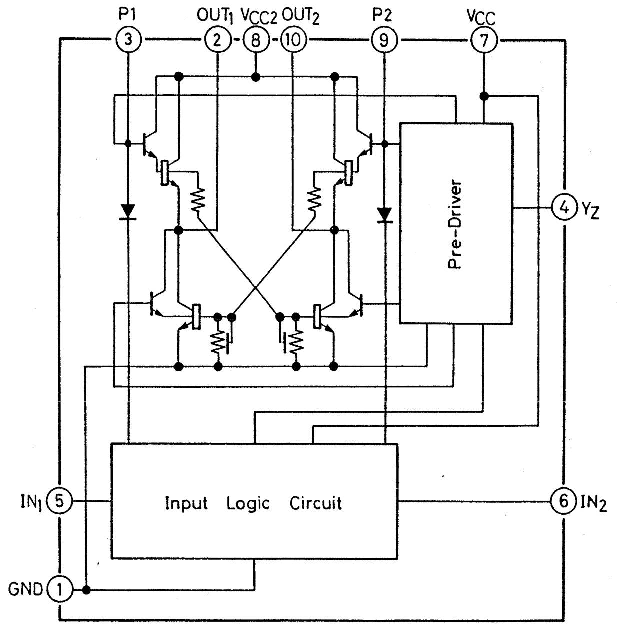

TEST2 1
A1 2
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
A9 10
A10 11
A11 12
A12 13
A13 14
NC 15
NC 16
NC 17
NC 18
VSS 19
OSC 20
G.PH 21
42 VDD
41 G1
40 G2
39 G3
38 G4
37 G5
36 G6
35 G7
34 G8
33 NC
32 DIM
31 f1
30 f2
29 f3
28 f4
27 f5
26 f6
25 f7
24 T
23 TEST1
22 T.PH


+12dB
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
+24dB
22
20
18
16
14
12
10
8
6
4
2
0
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
f1
f2
f3
f4
f5
f6
f7
TOTAL
G1
G2
G3
G4
G5
G6
G7
G8


G PH
T PH
f1
f2
f3
f4
f5
f6
f7
T
MPX
A/D
CONTROL
FF
DRIVER
MPX
OSC
OSC
DIV
VDD
VSS
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
G1
G2
G3
G4
G5
G6
G7
G8
N.C
TEST2
DIM

Pin name	Pin No.	Pin format	Instruction
VDD	42		Power source, +5V type
VSS	19		Power source, Gnd
G.PH	21		Connect to C, R for the time constant to determine the peak hold reset time is Spectrum Analyzer display of G.E.Q.
T.PH	22		Connect to C, R for the time constant (peak hold reset time: Total display)
DIM	32		Dimmer control terminal Dimmer ON: 1, OFF: 0
f1 ~ f7 T	31 ~ 25 24		Rectifier voltage of Music signal input for terminal
OSC	20		Connect to C, R for the oscillator.
A1 ~ A13	2 ~ 14		Open drain driver, Grid control
G1 ~ G9	44 ~ 33		Open drain driver, Grid control
TEST1	23		Test terminal, normal → Vss
TEST2	1		Test terminal, normal → Open or connected through the resistor; 1M ohm.
NC	15 ~ 18, 33		Open

IC901 LB1641 (Motor Driver)


P1
OUT1
VCC2
OUT2
P2
VCC
3
2
8
10
9
7
Pre-Driver
4 YZ
IN1 5
Input Logic Circuit
6 IN2
GND 1

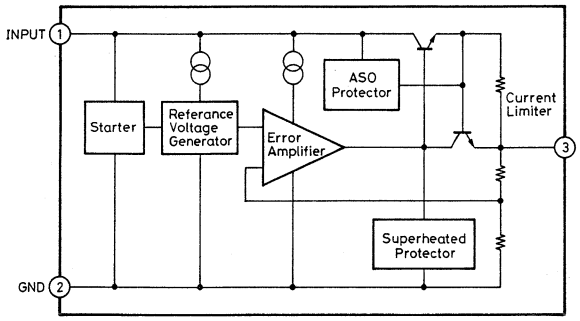
Input		Output		Action
IN_1	IN_2	OUT_1	OUT_2	
0	0	0	0	Brake
1	0	1	0	Normal(Reverse)Rotary
0	1	0	1	Reverse(Normal)Rotary
1	1	0	0	Brake

IC902 NJM78M15FA

(15V 3-Terminal Constant Voltage Regulated Power Supply)

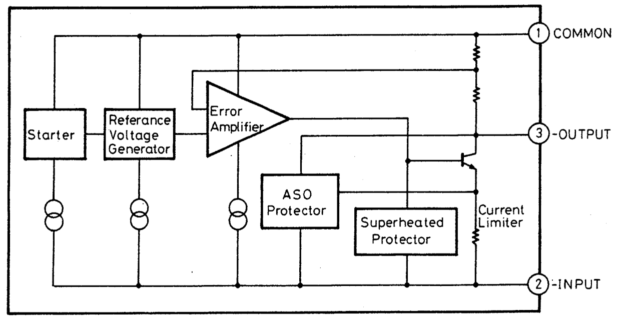
IC904, 905 AN7812F

(12V 3-Terminal Constant Voltage Regulated Power Supply)


INPUT 1
Starter
Referance Voltage Generator
ASO Protector
Error Amplifier
Current Limiter
3 OUTPUT
Superheated Protector
GND 2

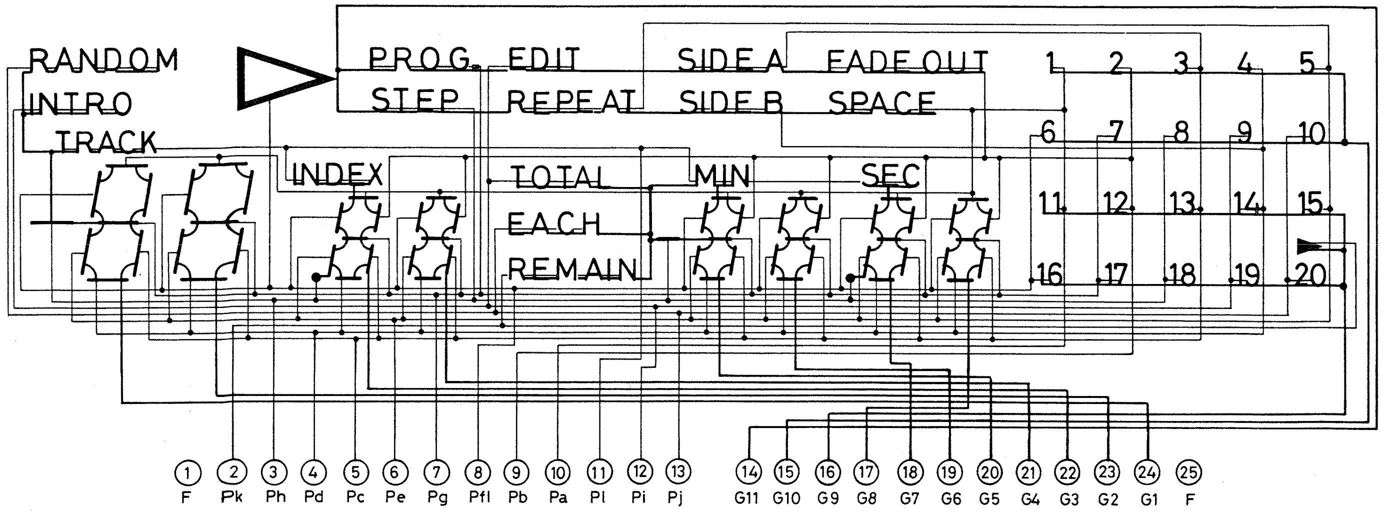
IC903 NJM79M15FA

(−15V 3-Terminal Constant Voltage Regulated Power Supply)

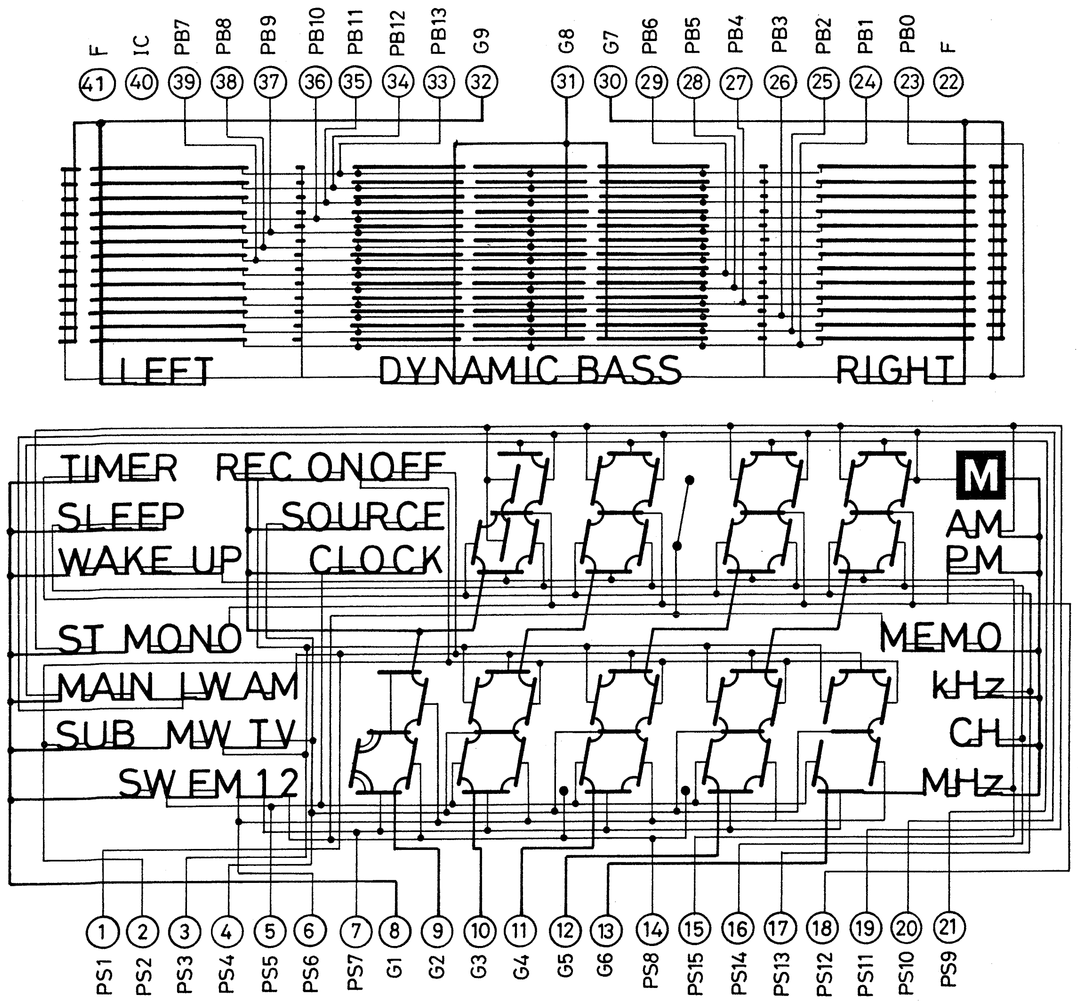

1 COMMON
Starter
Referance Voltage Generator
Error Amplifier
3 -OUTPUT
ASO Protector
Superheated Protector
Current Limiter
2 -INPUT

IC BLOCK DIAGRAM

CP5395GR (Flourecent Display) ..... CD FL PCB


RANDOM
INTRO
TRACK
PROG.
EDIT
SIDE A
FADE OUT
STEP
REPEAT
SIDE B
SPACE
INDEX
TOTAL
MIN
SEC
EACH
REMAIN
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕
F Pk Ph Pd Pc Pe Pg Pfl Pb Pa Pl Pi Pj G11 G10 G9 G8 G7 G6 G5 G4 G3 G2 G1 F

CP5394GR (Flourecent Display) ..... TUNER FL PCB


F IC PB7 PB8 PB9 PB10 PB11 PB12 PB13 G9 G8 G7 PB6 PB5 PB4 PB3 PB2 PB1 PB0 F
㊶ ㊵ ㊴ ㊳ ㊲ ㊱ ㉟ ㉞ ㉝ ㉜ ㉛ ㉚ ㉙ ㉘ ㉗ ㉖ ㉕ ㉔ ㉓ ㉒
LEFT
DYNAMIC BASS
RIGHT
TIMER
REC ONOFF
M
SLEEP
SOURCE
AM
WAKE UP
CLOCK
PM
ST MONO
MEMO
MAIN LW AM
kHz
SUB MW TV
CH
SW FM 12
MHz
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑
PS1 PS2 PS3 PS4 PS5 PS6 PS7 G1 G2 G3 G4 G5 G6 PS8 PS15 PS14 PS13 PS12 PS11 PS10 PS9

VOLTAGE TABLE (CD)

Transistor & IC

	Q101			Q102			Q201			Q202			Q203			Q204		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
PLAY	4.9	4.8	0	0	4.0	0	0	-0.6	0.3	0	0	0.6	0	2.2	0	0	0	4.8
STOP	4.9	0	4.8	0	4.0	0.3										0	0	4.8

	Q205			Q206			Q322			Q323			Q324			Q325		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
PLAY	0	0	4.8	0	0	0.7	0	4.9	0	0	5.6	0	0	4.2	0	0	-5.8	0.7
STOP	0	0	4.8				0	4.9	0	0	5.6	0	0	4.2	0	0	-5.8	0.7

	Q326			Q327			Q351			Q352			Q353			Q354		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
PLAY	4.9	4.9	5.6	-5.0	-5.0	-5.8	0	2.5	0	3.4	-1.5	3.0	0	2.0	0	3.4	-1.4	3.1
STOP	4.9	4.9	5.6	-5.0	-5.0	-5.8	0	3.0	0	2.3	-2.0	2.5	0	3.1	0	2.3	-1.5	2.0

	Q355			Q356			Q358			Q359			Q360			Q361		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
PLAY	0	0	4.9	0	4.9	0	0	2.3	0	2.3	-1.9	2.3	0	0	4.9	0	4.9	0
STOP																		

	Q501			Q504			Q505			Q506			Q507			Q601		
	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
PLAY	4.0	4.9	4.7	0	0	-4.9	0	0	-4.9	1.3	4.9	1.9	1.3	4.9	1.9	5.0	2.5	5.0
STOP	4.0	4.9	4.7	0	0	0.6	0	0	0.6	1.3	4.9	1.9	1.3	4.9	1.9	5.0	-4.9	5.0

	Q602			Q604		
	E	C	B	E	C	B
PLAY	0	5.0	0	2.5	2.5	1.9
STOP	0	5.0	0	1.3	-4.9	0

IC201.202

	1	2	3	4	5	6	7	8	9	10
PLAY	FL	FL	FL	FL	-9.8	FL	FL	FL	FL	9.7
STOP	0	0	0	0	-9.8	0	0	0.3	0.3	9.7

IC301

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PLAY	FL	FL	FL	FL	4.9	4.8	-	-	-	4.8	4.0	4.0	-	4.0	*4.8	⁑4.8
STOP	FL	-7.5	-7.8	FL	4.9	4.8	0	0	0	4.9	0	4.1	0	4.8	0	0

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
PLAY	4.8	0	4.9	FL	FL	FL	FL	FL	FL	FL	FL	FL	0	FL	FL	0
STOP	4.8	4.8	4.8	4.8	0	0	0	0	4.7	4.7	4.7	4.7	⁂5	FL	FL	0

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
PLAY	0	-	4.8	4.8	4.8	-	4.9	FL	FL	FL	FL	FL	FL	FL	FL	FL
STOP	0	-	4.8	4.8	4.8	-	4.9	-27	-27	-27	-27	-27	-27	-27	-27	-27

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
PLAY	FL	FL	-	-	2	FL	FL	-30	-3.7	FL	FL	FL	FL	FL	FL	4.9
STOP	-27	-27	0	0	2	-16	-29	-29	-29	-23	-27	-27	-27	-11	-11	4.9

* OPEN ⁑ CLOSE ⁂ CD OFF

IC503

	1	2	3	4	5	6	7	8
PLAY	2.0	2.0	2.0	-5.0	2.0	2.0	2.0	5.0
STOP	2.0	2.0	2.0	-5.0	2.0	2.0	2.0	5.0

IC504.505

	1	2	3	4	5	6	7	8
PLAY	FL	FL	FL	-5.0	FL	FL	FL	4.9
STOP	0	0	0	-5.0	0	0	0	4.9

IC506

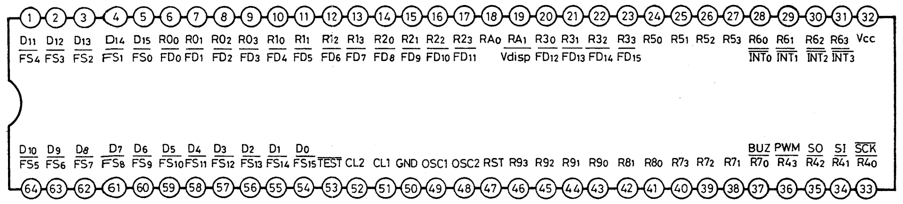
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PLAY	-4.9	0	FL	0	FL	FL	0	0	0	0	FL	FL	0	FL	0	4.9
STOP	-5.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.0

IC507

	1	2	3	4	5	6	7	8	9
PLAY	4.9	-	-	-	0	-	-	-	4.9
STOP	4.9	4.7	4.7	4.7	0	4.7	4.7	4.7	4.9

IC BLOCK DIAGRAM

IC404 HD404708A30S (Tuner Microprocessor)

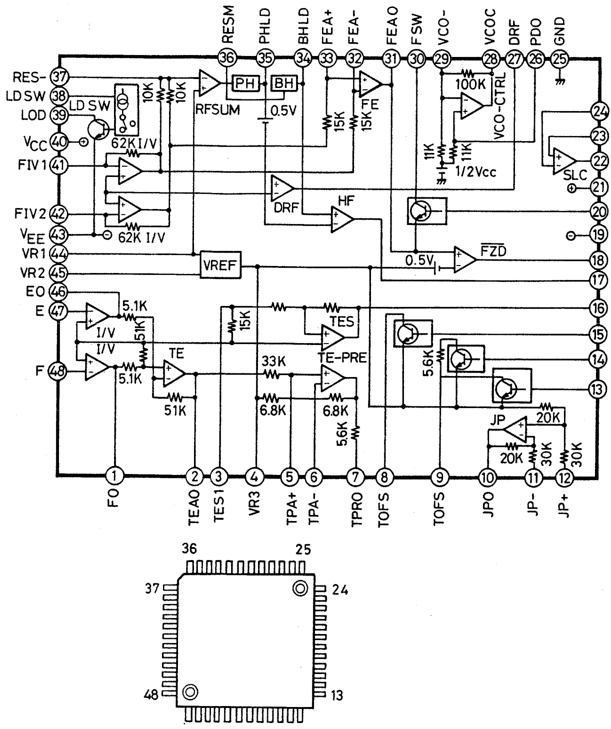


Pin Function of IC404 (HD404708A30S)

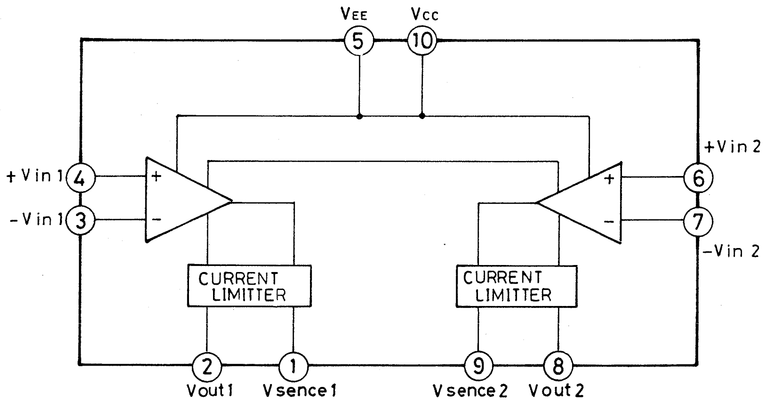
Pin No.	Pin Name	I/O	Initial	Active	Back up	Description
1	SEGMENT OUT 5	O				FL segment out 5
2	SEGMENT OUT 4	O				FL segment out 4
3	SEGMENT OUT 3	O				FL segment out 3
4	SEGMENT OUT 2	O				FL segment out 2
5	SEGMENT OUT 1	O				FL segment out 1
6	DIGIT OUT 1	O				FL segment out 1
7	DIGIT OUT 2	O				FL segment out 2
8	DIGIT OUT 3	O				FL segment out 3
9	DIGIT OUT 4	O				FL segment out 4
10	DIGIT OUT 5	O				FL segment out 5
11	DIGIT OUT 6	O				FL segment out 6
12	FUNCT 4	O	L	H	L	Function switching signal (TUNER), TUNER selecting; H pulse
13	FUNCT 3	O	L	H	L	Function switching signal (AUX), AUX selecting; H pulse
14	FUNCT 2	O	L	H	L	Function switching signal (VCR), VCR selecting; H pulse
15	FUNCT 1	O	L	H	L	Function switching signal (DAT), DAT selecting; H pulse
16	–20 dB MUTE	O	L	H	L	–20 dB Muting output, –20 dB MUTE on: H, off: L
17	∞ MUTE	O	L	L	Hi-Z	∞ MUTE output, ∞ MUTE on: H, off: L
18	POWER SW	I		L		Power SW key input, normal: H, SW on: L
19	Vdisp					Power source for display
20	VOL, UP	O	L	H	L	VOL Up signal output, normal: H, vol up: L
21	VOL, DOWN	O	L	H	L	VOL Down signal output, normal: H, vol down: L
22	VOL. IND					VOL Indicator LED output, power on: H, Vol operation: pulse
23	CD CONT	O	L	H	L	CD control output, normal: L, CD start (by Timer): L
24	TAPE CONT	O	Hi-Z	L or H	Hi-Z	TAPE control output. In Timer operation, TAPE PLAY → L, TAPE REC → H, Normal → Hi-Z.
25	FM/MONO	O	L	H	L	To enforce monoral in FM. Automatic switching: L, enforce Mono.: H
26	TV MAIN IND	I		L		Input for the display to be main source in TV Bilingual.
27	TV SUB IND	I		L		Input for the display to be sub source in TV Bilingual.
28	IR	I				IR Remocon signal input
29	INH	I		L		Inhibit. Detect AC source. AC: H, AC failed: L
30	STEREO IND	I		L		Input for the display to be Stereo mode, TV or FM. stereo: L
31	TU MUTE	O	H	H	Hi-Z	Muting output in tuner. muting off: L, muting on: H
32	Vcc					Power source
33	SCK	O				Clock signal to send the data to PLL IC.
34	SI	I				Data input of Tuner/SD, IF counter from PLL IC.
35	SO	O				Data output to PLL IC.
36	CE	O				Chip enable output to PLL IC.
37	CD FADE CONT/OSC CHK	O	L	H	L	CD Fade control signal. normal: L, CD Fade in. Fade out: H, Power off: time adjust clock (check key 1).
38	KEY OUT 1	O				Key matrix output signal 1
39	KEY OUT 2	O				Key matrix output signal 2
40	KEY OUT 3	O				Key matrix output signal 3
41	KEY OUT 4	O				Key matrix output signal 4
42	KEY OUT 5	O				Key matrix output signal 5
43	KEY IN 1	I				Key matrix input signal 1
44	KEY IN 2	I				Key matrix input signal 2
45	KEY IN 3	I				Key matrix input signal 3
46	KEY IN 4	I				Key matrix input signal 4
47	RESET					(Reset terminal)
48	OSC2					Crystal OSC
49	OSC1					Crystal OSC
50	GND					Gnd
51	CL1					
52	CL2					
53	TEST					
54	POWER RY	O	L	H	Hi-Z	Power relay control signal, Relay off: L, on: H
55	SEGMENT OUT 15	O				FL display, segment output 15
56	SEGMENT OUT 14	O				FL display, segment output 14
57	SEGMENT OUT 13	O				FL display, segment output 13
58	SEGMENT OUT 12	O				FL display, segment output 12
59	SEGMENT OUT 11	O				FL display, segment output 11
60	SEGMENT OUT 10	O				FL display, segment output 10
61	SEGMENT OUT 9	O				FL display, segment output 9
62	SEGMENT OUT 8	O				FL display, segment output 8
63	SEGMENT OUT 7	O				FL display, segment output 7
64	SEGMENT OUT 6	O				FL display, segment output 6

< CD SECTION >

IC101 LA9200NM (RF Amp. Servo)

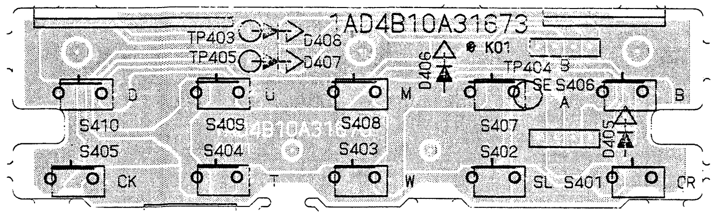

RESM
PHLD
BHLD
FEA+
FEA-
FEAO
FSW
VCO-
VCOC
DRF
PDO
GND
RES-
LDSW
LOD
Vcc
FIV1
FIV2
VEE
VR1
VR2
EO
E
F
EFMO
EFMO
SLCO
Vcc
FOCS
VEE
FZD
HFL
TES
TOFF
TGL
THLD
FO
TEAO
TES1
VR3
TPA+
TPA-
TPRO
TOFS
TOFS
JPO
JP-
JP+
RFSUM
VREF
I/V
DRF
HF
TE
TES
TE-PRE
JP
1/2Vcc
VCO-CTRL
36
25
37
24
48
13

IC201, 202 LA6510 (Dual Power Operational Amp.)

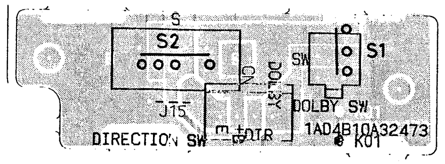

VEE
Vcc
+Vin 1
-Vin 1
+Vin 2
-Vin 2
CURRENT LIMITTER
CURRENT LIMITTER
Vout1
Vsence1
Vsence2
Vout2

WIRING DIAGRAM (FL/TONE CONT. & OTHERS)

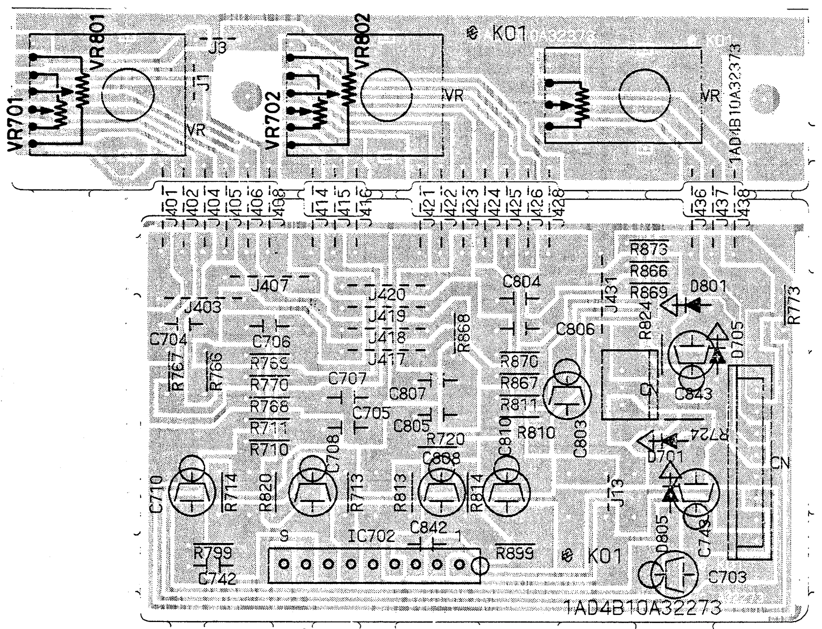
TUNER SW PCB


1AD4B10A31673
TP403
TP405
D406
D407
K01
TP404
S406
S410
S409
S408
S407
S405
S404
S403
S402
S401
D405
CK
SL
CR
W

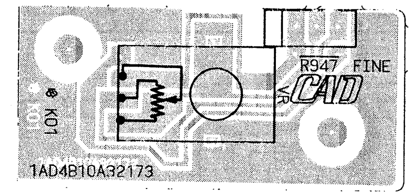
DOLBY SW PCB


S2
S1
J15
DOLBY SW
1AD4B10A32473
K01
DIRECTION SW

BASS/TREBLE PCB

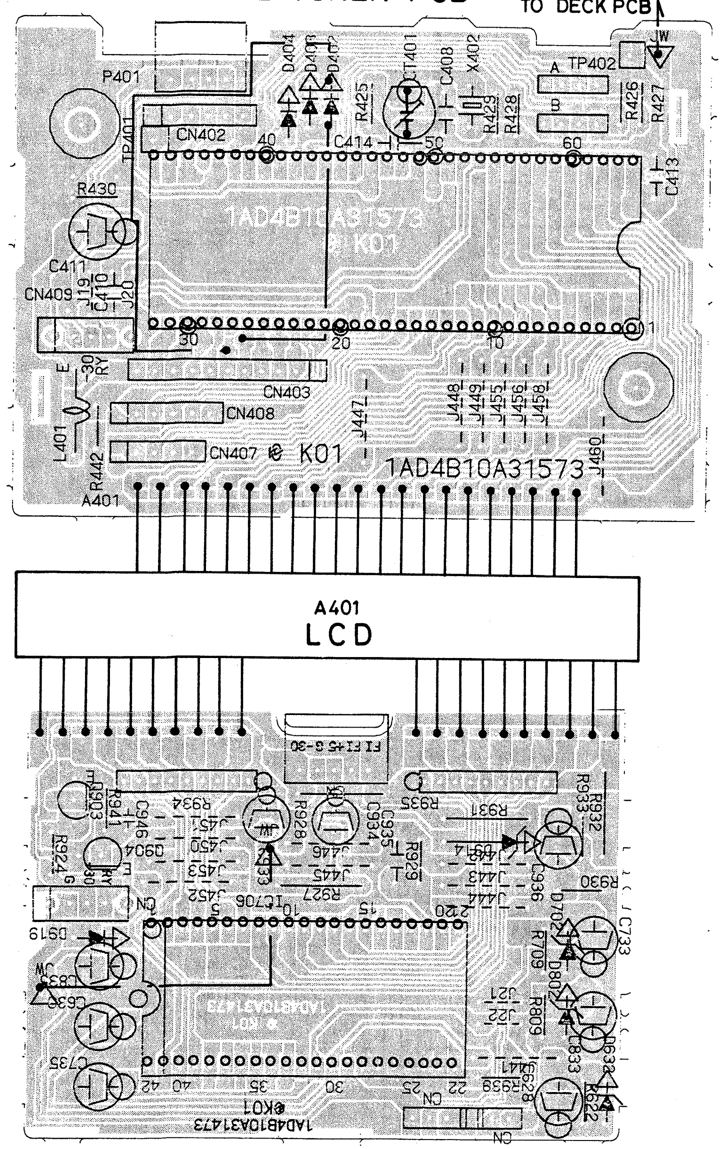

VR801
VR802
VR701
VR702
J1
J3
K01
1AD4B10A32373
IC702
R859
C742
R798
C710
C703
D801
D805
R773
C804
C806
1AD4B10A32273

BASS/TREBLE CONT. PCB

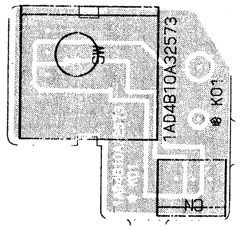

R947 FINE
K01
1AD4B10A32173

WOOFER PCB

FL TUNER PCB

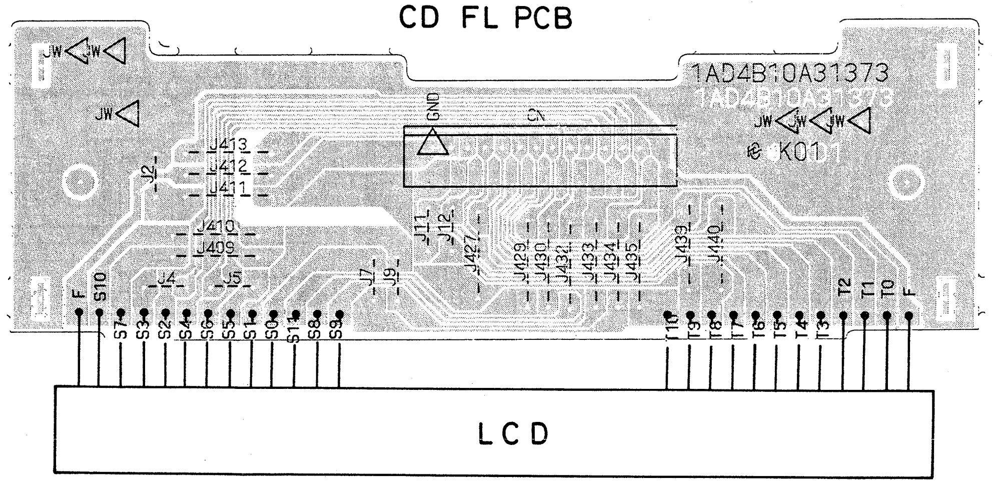

TO DECK PCB
P401
TP401
CN402
TP402
IC401
X402
C414
R430
C411
CN409
1AD4B10A31573
K01
CN403
CN408
CN407
L401
R442
A401
A401
LCD
1AD4B10A31473
K01
D919

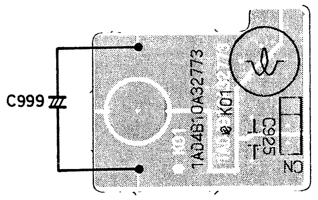
FL AMP PCB


1AD4B10A32573
K01

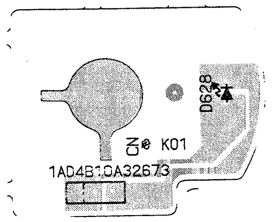
IR PCB

CD FL PCB


1AD4B10A31373
K01
JW
GND
LCD
S10
T2
T1
T0
F

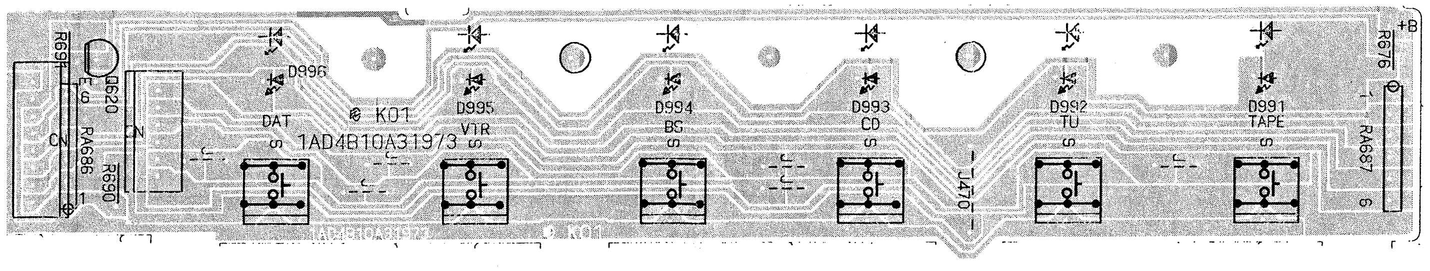

C999
1AD4B10A32773
K01

MAIN VR2 PCB

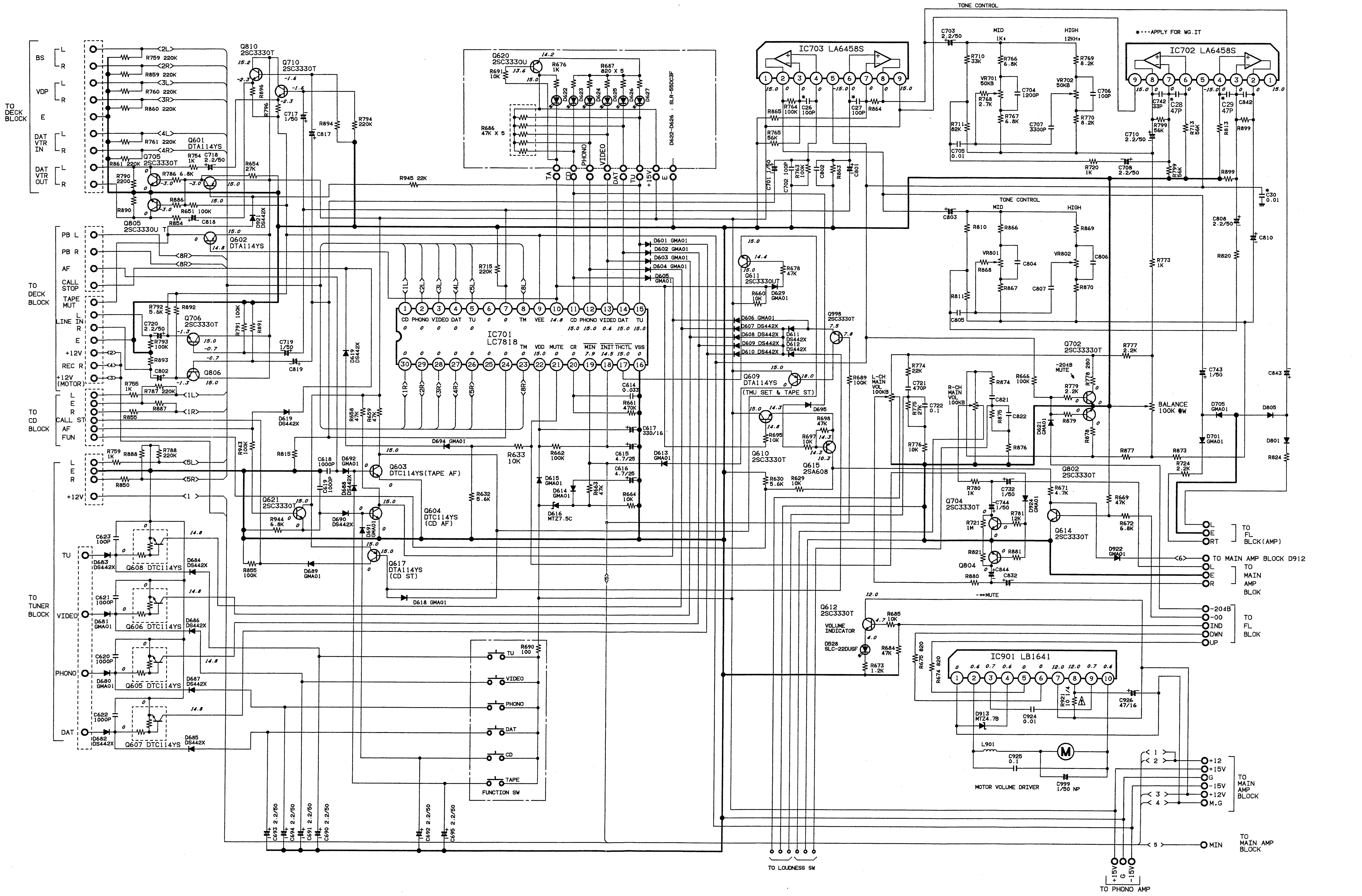

D628
K01
1AD4B10A32673

VR LED PCB

FUNCTION SW PCB

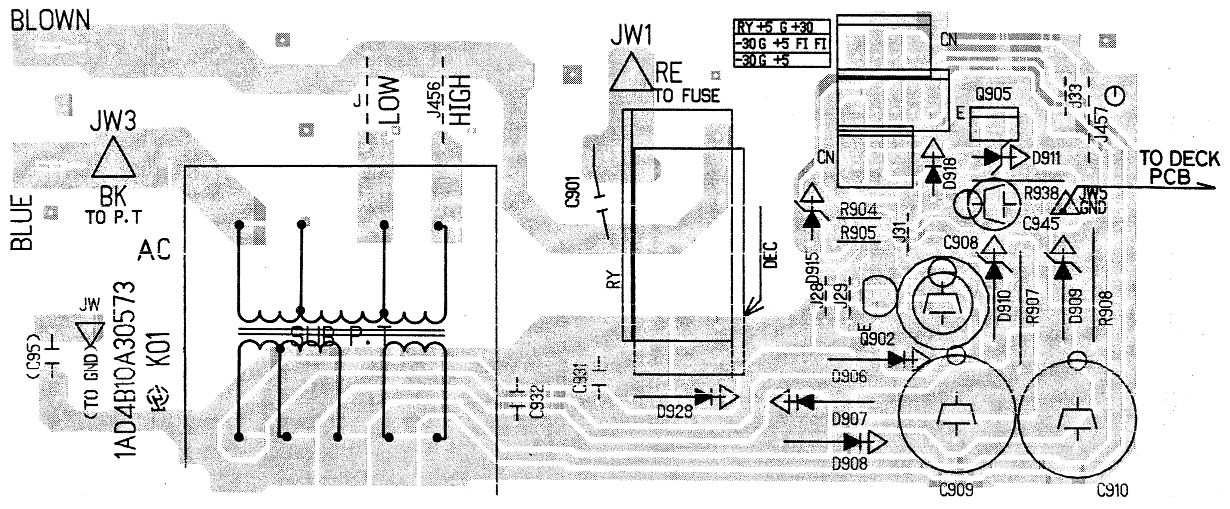

R696
D620
RA686
R690
D996
DAT
K01
1AD4B10A31973
D995
VTR
D994
BC
D993
CD
D992
TU
D991
TAPE
R676
RA687
J470

SCHEMATIC DIAGRAM (PRE AMP)

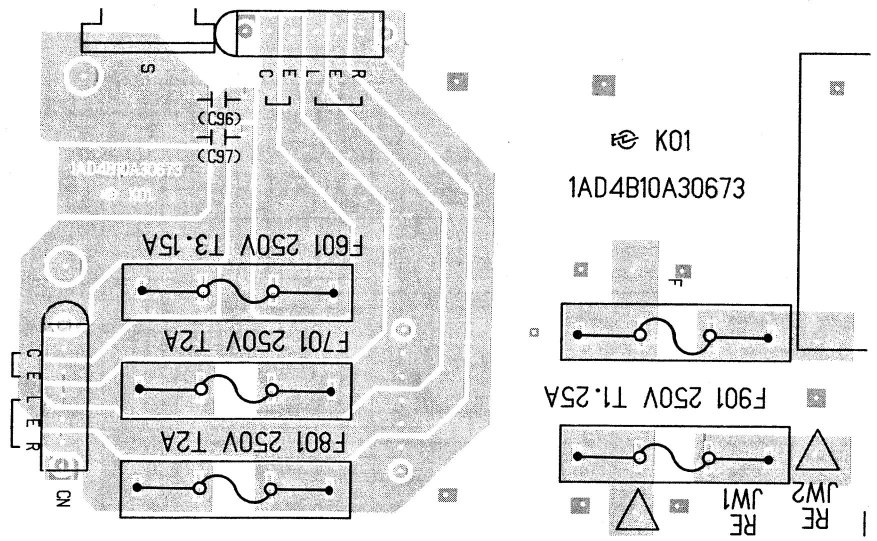


TO DECK BLOCK
BS
VDP
DAT VTR IN
DAT VTR OUT
Q810 2SC3330T
Q710 2SC3330T
Q601 DTA114YS
Q705 2SC3330T
Q805 2SC3330U
Q602 DTA114YS
Q620 2SC3330U
R686 47K X 5
R687 820 X 5
D622-D626 : SLR-55DC3F
TA
CD
PHONO
VIDEO
DAT
TU
+15V
E
R945 22K
TONE CONTROL
IC703 LA6458S
IC702 LA6458S
*···APPLY FOR WG.IT
MID
HIGH
VR701 50KB
VR702 50KB
VR801
VR802
PB L
PB R
AF
CALL STOP
TAPE MUT
LINE IN
REC R
+12V (MOTOR)
Q706 2SC3330T
Q806
IC701 LC7818
CD PHONO VIDEO DAT TU TM VEE
TM VDD MUTE CR MIN INIT THCTL VSS
D601 GMA01
D602 GMA01
D603 GMA01
D604 GMA01
D605 GMA01
Q611 2SC3330UT
Q609 DTA114YS (TMU SET & TAPE ST)
Q610 2SC3330T
Q615 2SA608
Q998 2SC3330T
Q702 2SC3330T
L-CH MAIN VOL 100KB
R-CH MAIN VOL 100KB
-20dB MUTE
BALANCE 100K ※W
Q802 2SC3330T
Q704 2SC3330T
Q614 2SC3330T
Q804
-∞MUTE
TO CD BLOCK
CALL ST
FUN
Q603 DTC114YS (TAPE AF)
Q604 DTC114YS (CD AF)
Q621 2SC3330T
Q617 DTA114YS (CD ST)
D618 GMA01
D616 MTZ7.5C
TO TUNER BLOCK
TU
VIDEO
PHONO
DAT
Q608 DTC114YS
Q606 DTC114YS
Q605 DTC114YS
Q607 DTC114YS
FUNCTION SW
TAPE
Q612 2SC3330T
VOLUME INDICATOR
D528 SLC-22DUSF
IC901 LB1641
MOTOR VOLUME DRIVER
D913 MTZ4.7B
L901
C999 1/50 NP
TO FL BLCK(AMP)
TO MAIN AMP BLOCK D912
TO MAIN AMP BLOK
-20dB
-00
IND
DWN
UP
TO FL BLOK
+12
+15V
G
-15V
+12V
M.G
TO MAIN AMP BLOCK
MIN
TO MAIN AMP BLOCK
TO LOUDNESS SW
+15V G -15V
TO PHONO AMP

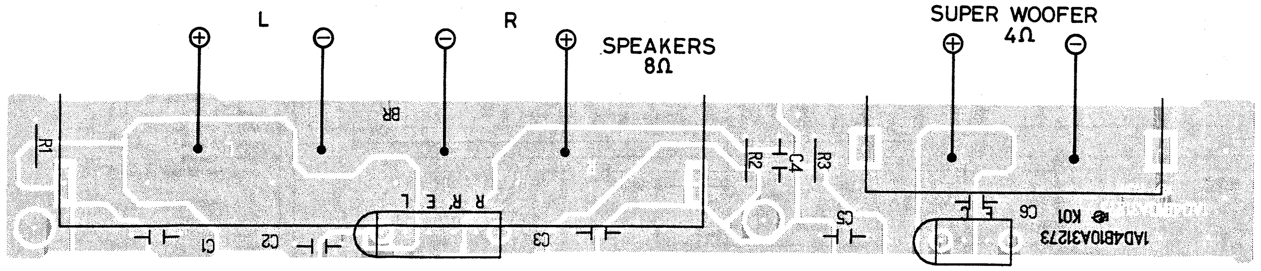
WIRING DIAGRAM (SPEAKER/PT POWER SUPPLY)


BLOWN
JW3
BLUE
BK
TO P.T
AC
JW1
RE
TO FUSE
LOW
HIGH
J456
RY +5 G +30
-30 G +5 FI FI
-30 G +5
CN
Q905
J457
TO DECK PCB
D911
R938
JW5 GND
C945
R904
R905
J31
C908
C901
RY
DEC
D915
D916
J28
J29
Q902
D910
R907
D909
R908
D906
D907
D908
D929
C931
C932
C909
C910
SUB P.T.
JW
(C95)
(TO GND)
1AD4B10A30573
K01

SUB-P.T. PCB

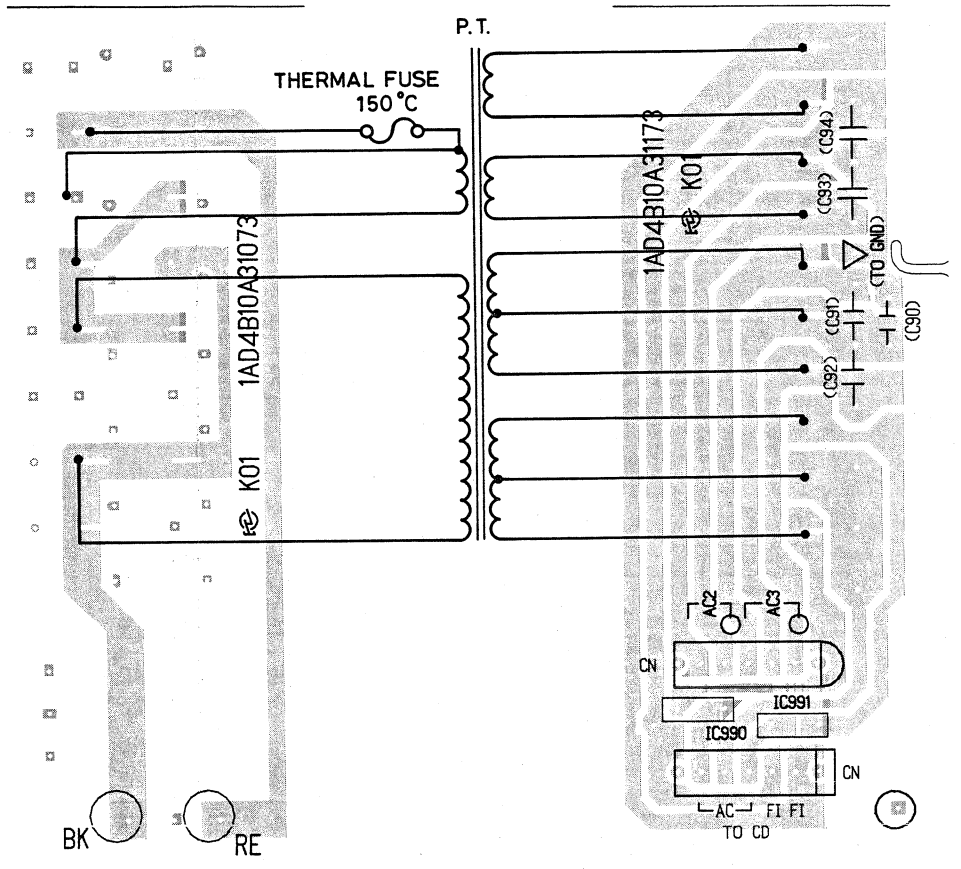

(C96)
(C97)
K01
1AD4B10A30673
F601 250V T3.15A
F701 250V T2A
F801 250V T2A
F901 250V T1.25A
JW1
RE
JW2
RE
CN

FUSE PCB


L
R
SPEAKERS
8Ω
SUPER WOOFER
4Ω
R1
R2
R3
C1
C2
C3
C4
C5
C6
K01
1AD4B10A31273

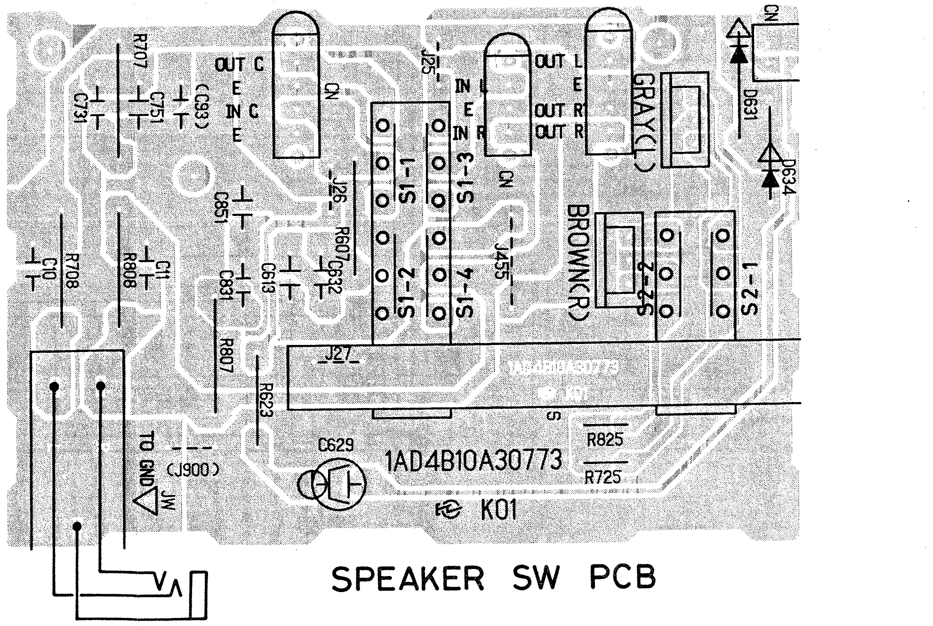
SP TERMINAL PCB

WIRING DIAGRAM (SPEAKER/PT POWER SUPPLY)


P.T.
THERMAL FUSE
150°C
1AD4B10A31073
K01
1AD4B10A31173
K01
(C94)
(C93)
(TO GND)
(C91)
(C90)
(C92)
AC2
AC3
CN
IC991
IC990
CN
AC FI FI
TO CD
BK
RE

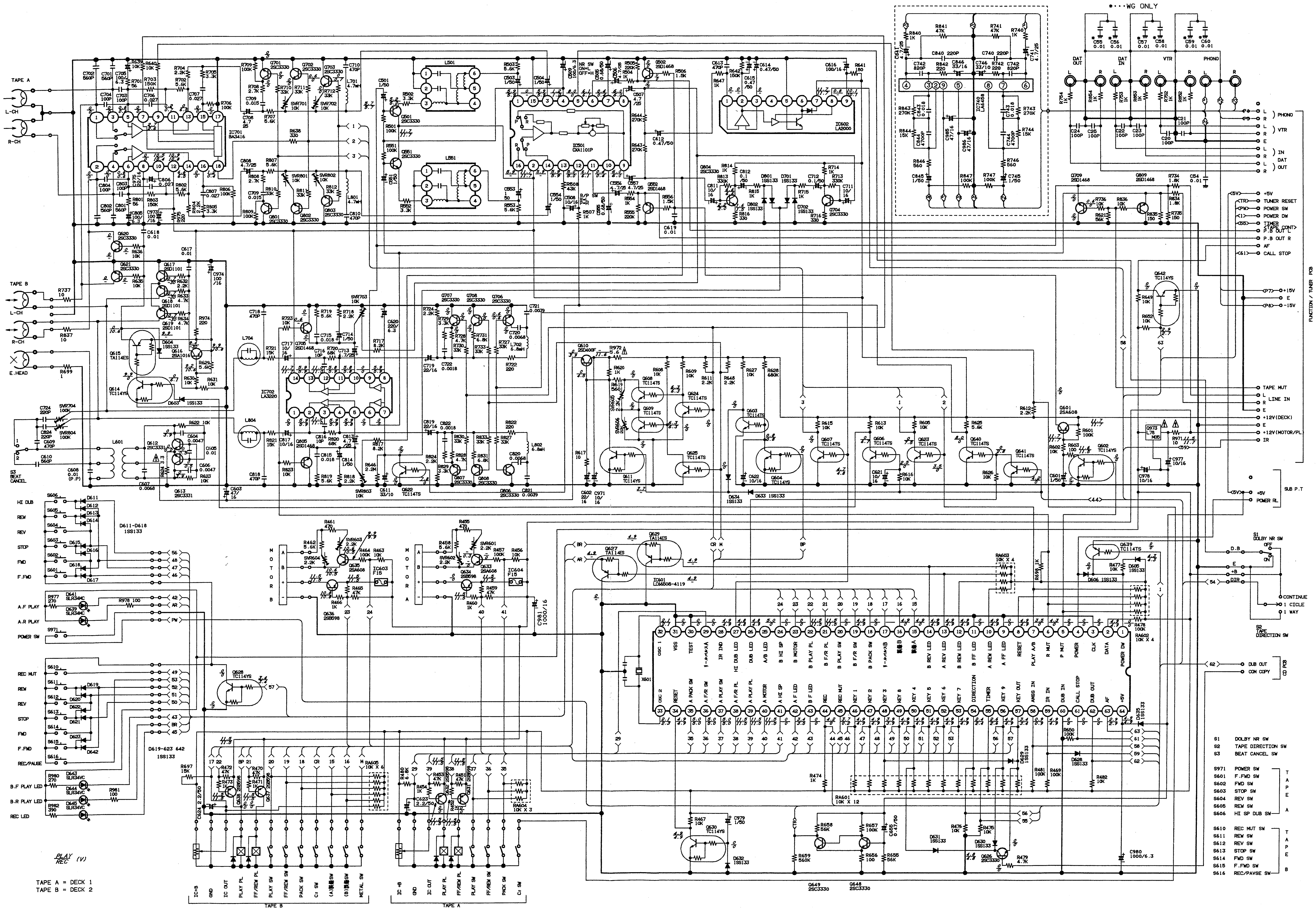
P.T. PRI. PCB

P.T. SEC. PCB


R707
C731
C751
OUT C
E
IN C
E
(C93)
CN
J25
IN L
E
IN R
OUT L
E
OUT R
OUT R
GRAY(L)
CN
D631
D634
C651
J26
R601
C632
C613
C11
R808
C631
R708
C10
S1-1
S1-2
S1-3
S1-4
J455
BROWN(R)
S2-2
S2-1
R807
R623
J27
TO GND
JW
(J900)
C629
1AD4B10A30773
K01
R825
R725

SPEAKER SW PCB

SCHEMATIC DIAGRAM (DECK)

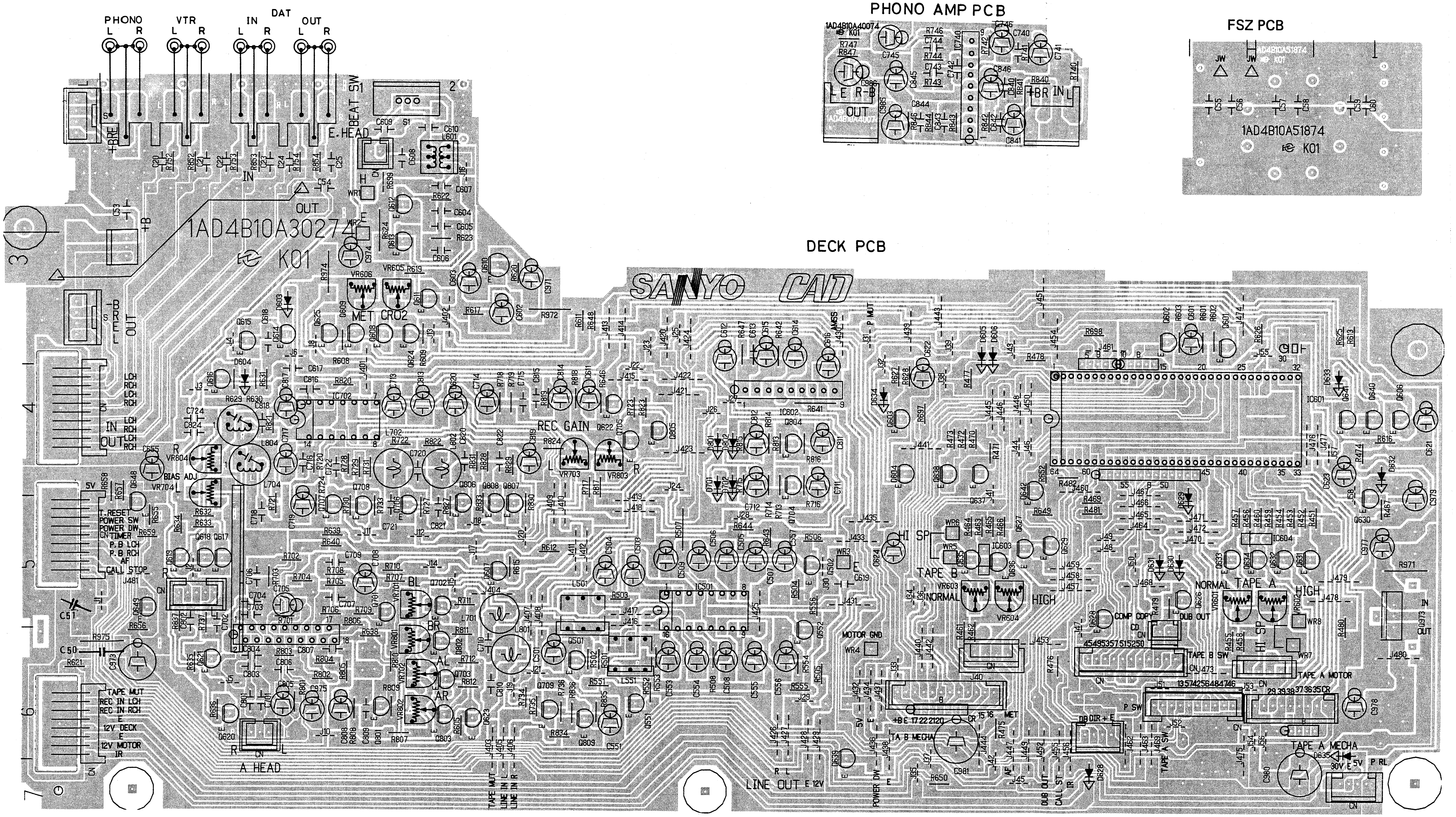

•···WG ONLY
TAPE A
L-CH
R-CH
TAPE B
E.HEAD
S3 BEAT CANCEL
IC701 BA3416
IC702 LA3220
IC501 CXA1101P
IC502 LA2000
IC601 LC6550B-4119
DAT OUT
DAT IN
VTR
PHONO
LINE IN
TAPE MUT
FUNCTION / TUNER PCB
SUB P.T
CD PCB
S1 DOLBY NR SW
S2 TAPE DIRECTION SW
CONTINUE
1 CICLE
1 WAY
HI DUB
REW
REV
STOP
FWD
F.FWD
A.F PLAY
A.R PLAY
POWER SW
REC MUT
REC/PAUSE
B.F PLAY LED
B.R PLAY LED
REC LED
TAPE B
TAPE A

PLAY/REC (V)

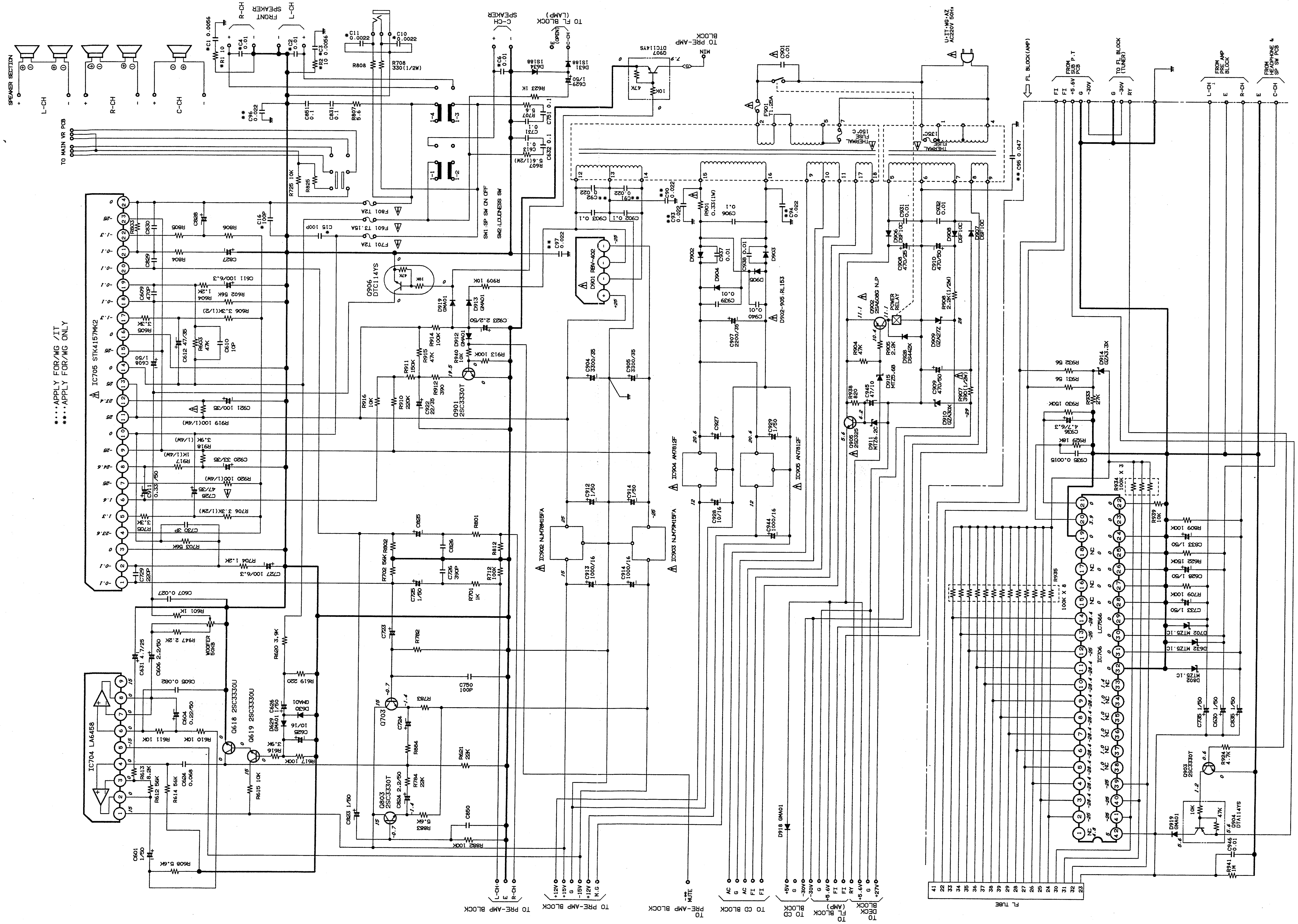
TAPE A = DECK 1
TAPE B = DECK 2

S1	DOLBY NR SW	
S2	TAPE DIRECTION SW	
S3	BEAT CANCEL SW	
S971	POWER SW	TAPE A
S601	F.FWD SW	
S602	FWD SW	
S603	STOP SW	
S604	REV SW	
S605	REW SW	
S606	HI SP DUB SW	
S610	REC MUT SW	TAPE B
S611	REW SW	
S612	REV SW	
S613	STOP SW	
S614	FWD SW	
S615	F.FWD SW	
S616	REC/PAVSE SW	

WIRING DIAGRAM (DECK)

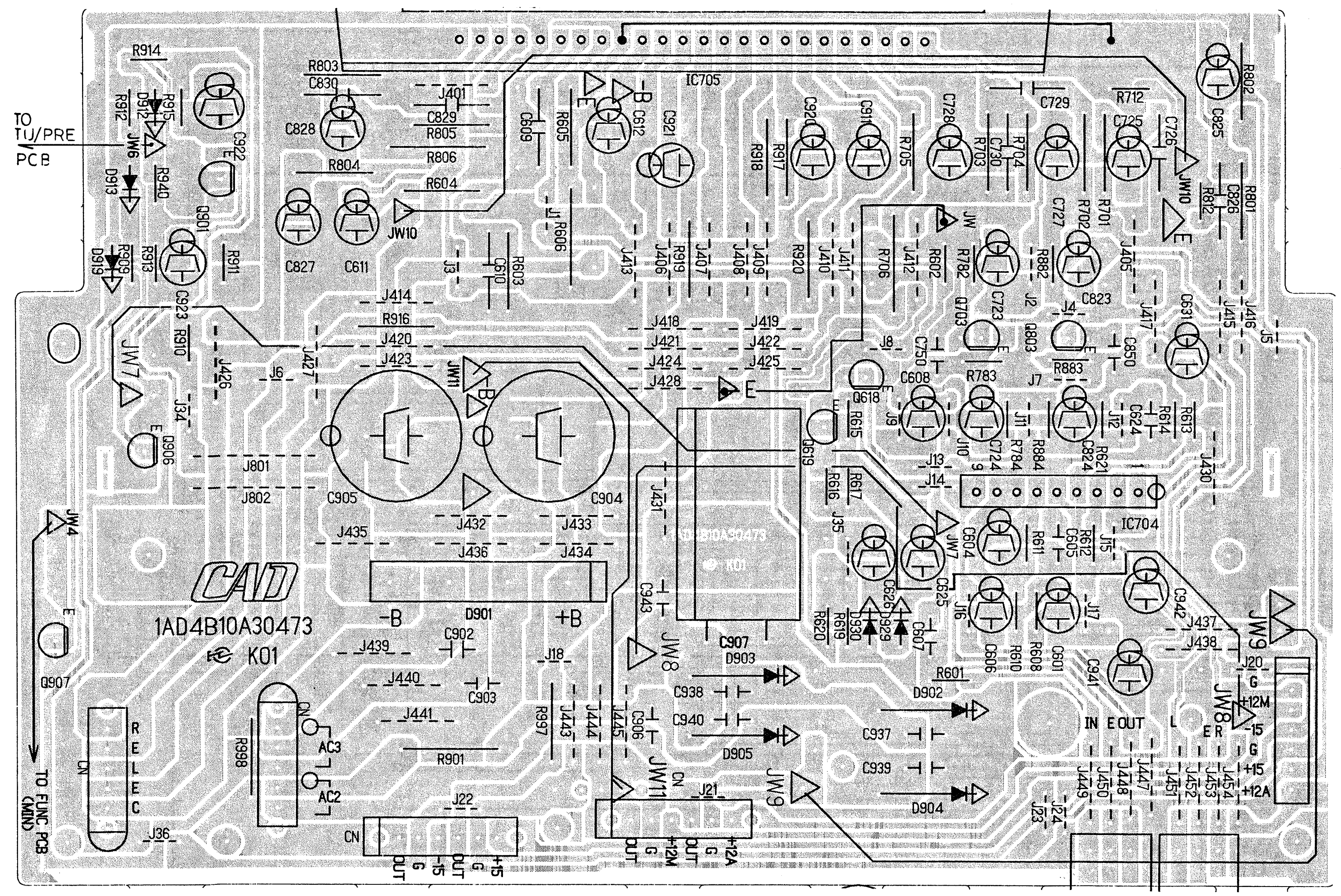

PHONO AMP PCB
FSZ PCB
DECK PCB
PHONO
VTR
DAT
IN
OUT
L
R
1AD4B10A30274
K01
1AD4B10A40074
1AD4B10A51874
SANYO
BEAT SW
E-HEAD
MET
CRO2
REC GAIN
BIAS ADJ
A HEAD
TAPE B
NORMAL
HIGH
TAPE A
HI SP
TAPE A MOTOR
TAPE A MECHA
TA B MECHA
LINE OUT
MOTOR GND
IC601
IC602
IC603
IC604
IC702
IC501
5V
T.RESET
POWER SW
POWER DW
TIMER
P.B LCH
P.B RCH
AF
CALL STOP
TAPE MUT
REC IN LCH
REC IN RCH
12V DECK
12V MOTOR
IR
LCH
RCH
COMP COPY
DUB OUT
TAPE B SW
P SW
12V

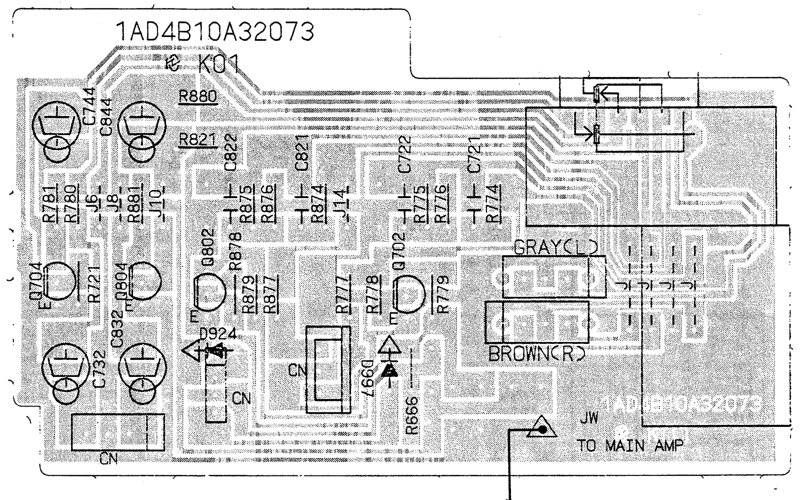
SCHEMATIC DIAGRAM (MAIN AMP)


SPEAKER SECTION
L-CH
R-CH
C-CH
FRONT SPEAKER
TO MAIN VR PCB
IC705 STK4157MK2
IC704 LA6458
IC706 LC7566
IC902 NJM78M15FA
IC903 NJM79M15FA
IC904 AN7812F
IC905 AN7812F
Q618 2SC3330U
Q619 2SC3330U
Q703
Q803 2SC3330T
Q901 2SC3330T
Q902 2SD686 N.P
Q903 2SC3330T
Q904 DTA114YS
Q905
Q906 DTC114YS
Q907 DTC114YS
D901 RBV-402
D902-905 RL153
POWER RELAY
THERMAL FUSE 150°C
THERMAL FUSE 135°C
F901 T1.25A
F601 T2A
F701 T2A
F801 T2A
U-IT/WG/AZ AC220V 50Hz
SW1 SP SW ON OFF
SW2 LOUDNESS SW
*...APPLY FOR/WG /IT
**...APPLY FOR/WG ONLY
FL BLOCK (AMP)
FROM SUB P.T PCB
TO FL BLOCK (TUNER)
FROM PRE-AMP BLOCK
FROM HEADPHONE & SP SW PCB
TO PRE-AMP BLOCK
TO FL BLOCK (LAMP)
TO PRE-AMP BLOCK
TO CD BLOCK
TO FL BLOCK (AMP)
TO DECK BLOCK
FL TUBE
R935 100K X 8
R934 100K X 3

WIRING DIAGRAM (MAIN AMP/VR/TAPE MECHA/REG. AMP)

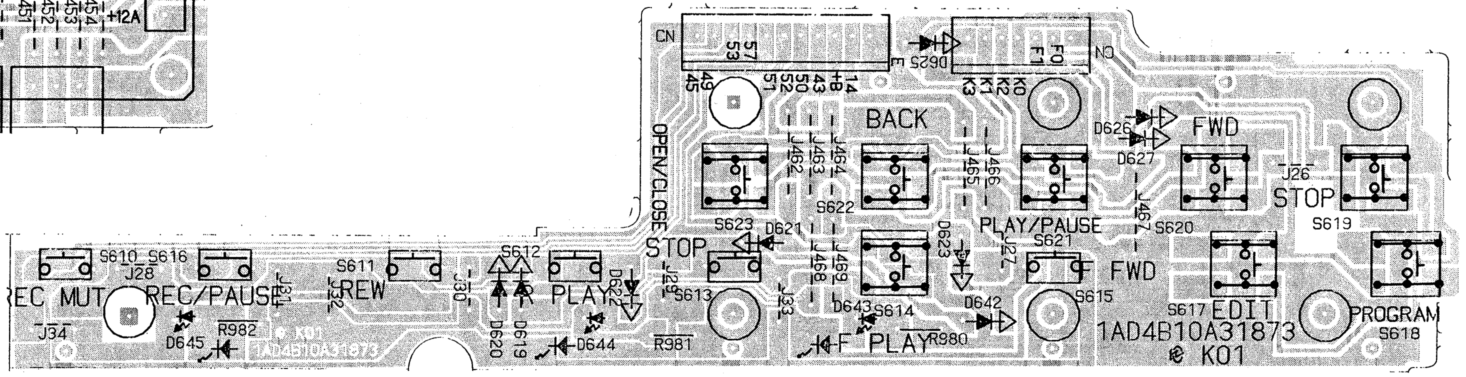
MAIN AMP PCB

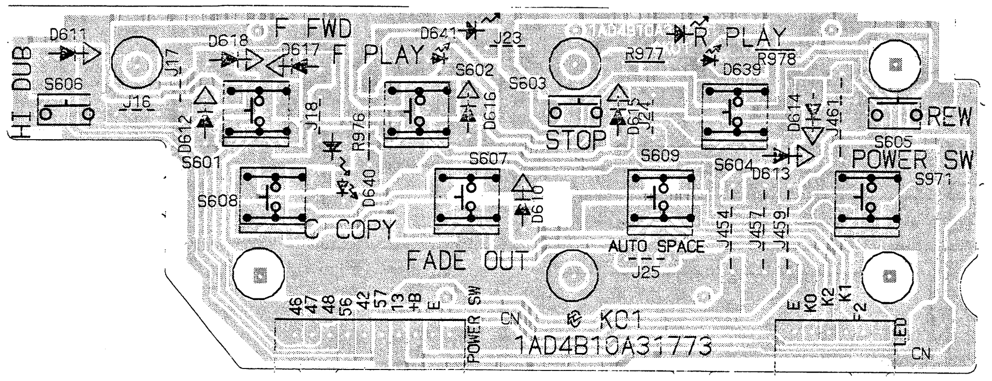

TO TU/PRE PCB
TO FUNC PCB (MIN)
1AD4B10A30473
K01
IC705
IC704
JW4
JW6
JW7
JW8
JW9
JW10
JW11
-B
+B
D901
D902
D903
D904
D905
AC3
AC2
CN
R E L E C
IN E OUT
L E R
G +12M -15 G +15 +12A
OUT G G +15 OUT +15
OUT G +12M OUT G +12A


1AD4B10A32073
K01
GRAY(L)
BROWN(R)
CN
JW
TO MAIN AMP
TO MAIN AMP PCB

MAIN VR PCB

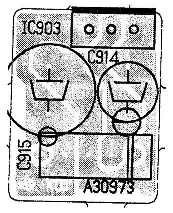
MECHA, TAPE-B PCB


CN
OPEN/CLOSE
BACK
FWD
STOP
PLAY/PAUSE
FWD
EDIT
PROGRAM
REC MUT
REC/PAUSE
REW
PLAY
STOP
F PLAY
1AD4B10A31873
K01

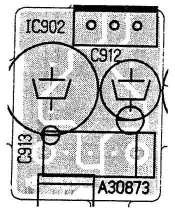

HI DUB
F FWD
F PLAY
R PLAY
STOP
REW
POWER SW
COPY
FADE OUT
AUTO SPACE
CN
K01
1AD4B10A31773
LED
CN

MECHA, TAPE-A PCB

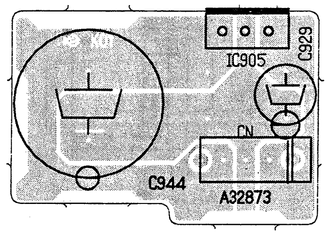
REGULATOR 2 PCB


IC903
C914
C915
A30973

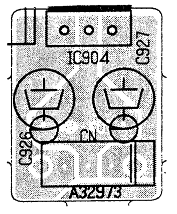
REGULATOR 1 PCB


IC902
C912
C913
A30873

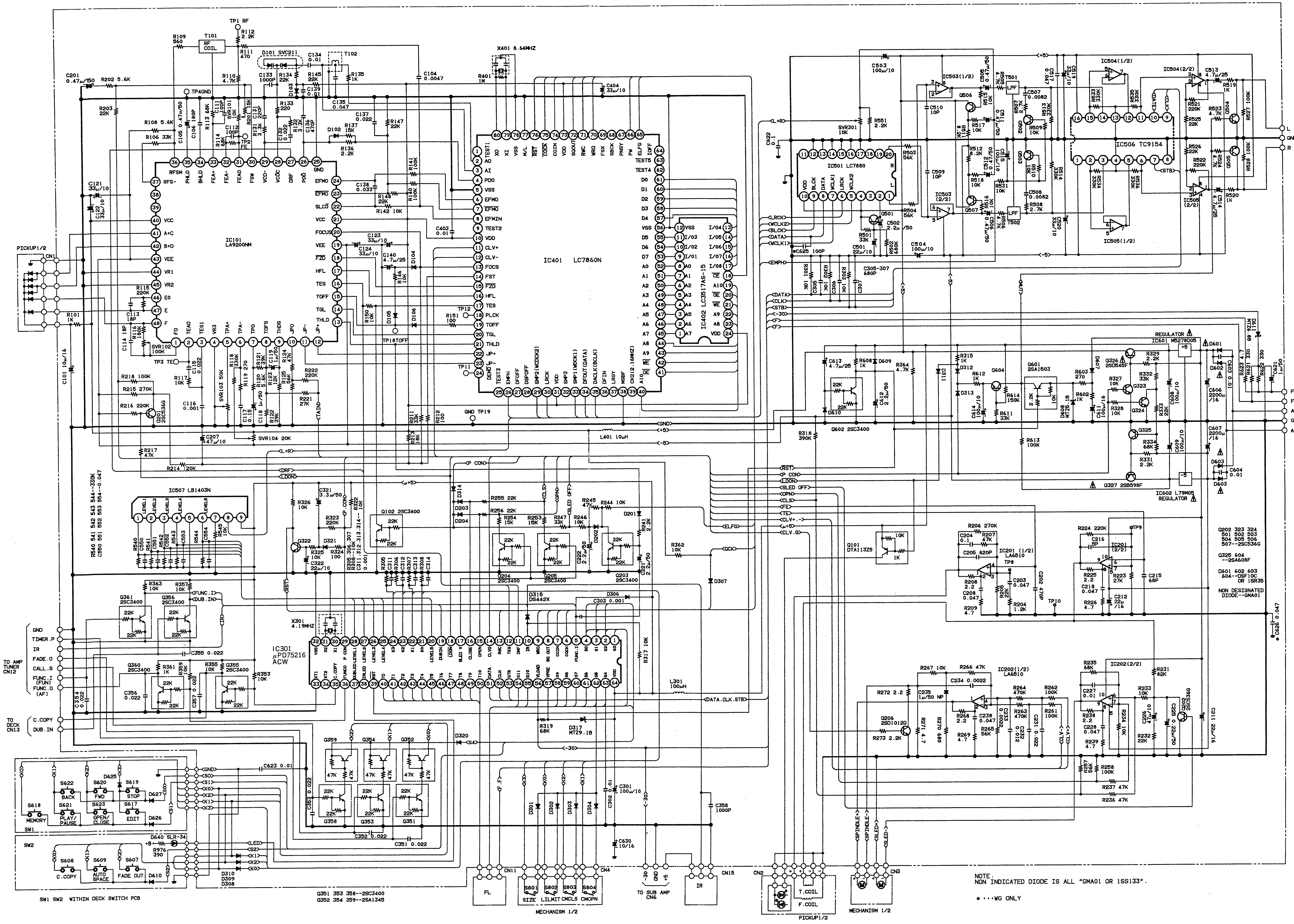
+12V MOTOR PCB


IC905
C929
CN
C944
A32873

+12V TU/DECK AMP PCB


IC904
C927
C926
CN
A32973

SCHEMATIC DIAGRAM (CD)

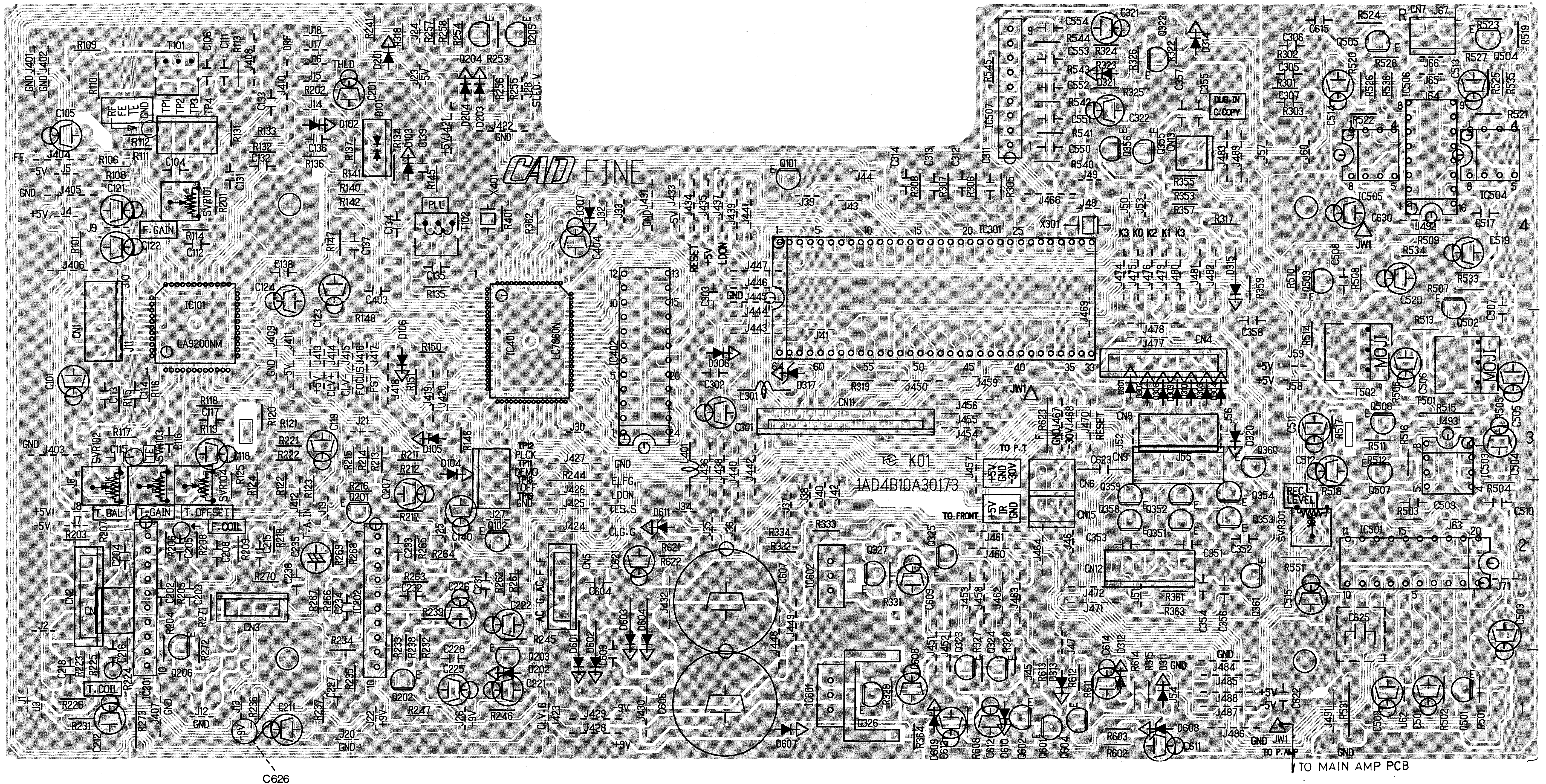

IC101 LA9200NM
IC401 LC7860N
IC402 LC3517AS-15
IC501 LC7880
IC506 TC9154
IC503(1/2)
IC503 (2/2)
IC504(1/2)
IC504(2/2)
IC505(1/2)
IC505 (2/2)
IC507 LB1403N
IC301 μPD75216 ACW
IC201 (1/2) LA6510
IC201 (2/2)
IC202(1/2) LA6510
IC202(2/2)
IC601 M5278D05 REGULATOR
IC602 L79M05 REGULATOR
X401 8.64MHZ
X301 4.19MHZ
T101 RF COIL
T102
T501
T502
LPF
TP1 RF
TP4GND
TP2 FE
TP3 TE
TP11
TP12
TP18TOFF
TP19 GND
TP8
TP9
TP10
D101 SVC211
Q101 DTA1132S
Q102 2SC3400
Q201 2SC536G
Q202 2SC536G
Q204 2SC3400
Q205 2SC3400
Q203 2SC3400
Q206 2SD1012G
Q322
Q326 2SD545F
Q327 2SB598F
Q601 2SA1503
Q602 2SC3400
Q604
Q360 2SC3400
Q361 2SC3400
Q355 2SC3400
Q356 2SC3400
Q351
Q352
Q353
Q354
Q358
Q359
L401 10μH
L301 100μH
PICKUP1/2
CN1
CN7 TO AMP
L
GND
R
FROM AMP CN5
F
F
AC
GND
AC
TO AMP TUNER CN12
GND
TIMER.P
IR
FADE.O
CALL.S
FUNC.I (FUN)
FUNC.O (AF)
TO DECK CN13
C.COPY
DUB.IN
S618 MEMORY
S622 BACK
S621 PLAY/PAUSE
S620 FWD
S623 OPEN/CLOSE
S619 STOP
S617 EDIT
D625
D626
D627
SW1
SW2
D640 SLR-34
S608 C.COPY
S609 AUTO SPACE
S607 FADE OUT
D610
D310 D309 D308
SW1 SW2 WITHIN DECK SWITCH PCB
Q351 353 358--2SC3400
Q352 354 359--2SA1345
CN11
FL
CN4
S801 SIZE
S802 LILMIT
S803 CMCLS
S804 CMOPN
MECHANISM 1/2
TO SUB AMP CN6
-30
GND
+5
CN15
IR
CN2
T.COIL
F.COIL
PICKUP1/2
CN3
MECHANISM 1/2
Q202 323 324 501 502 503 504 505 506 507--2SC536G
Q325 604 --2SA608F
D601 602 603 604--DSF10C OR 1SR35
NON DESIGNATED DIODE--GMA01

NOTE:
NON INDICATED DIODE IS ALL "GMA01 OR 1SS133".

* ···WG ONLY

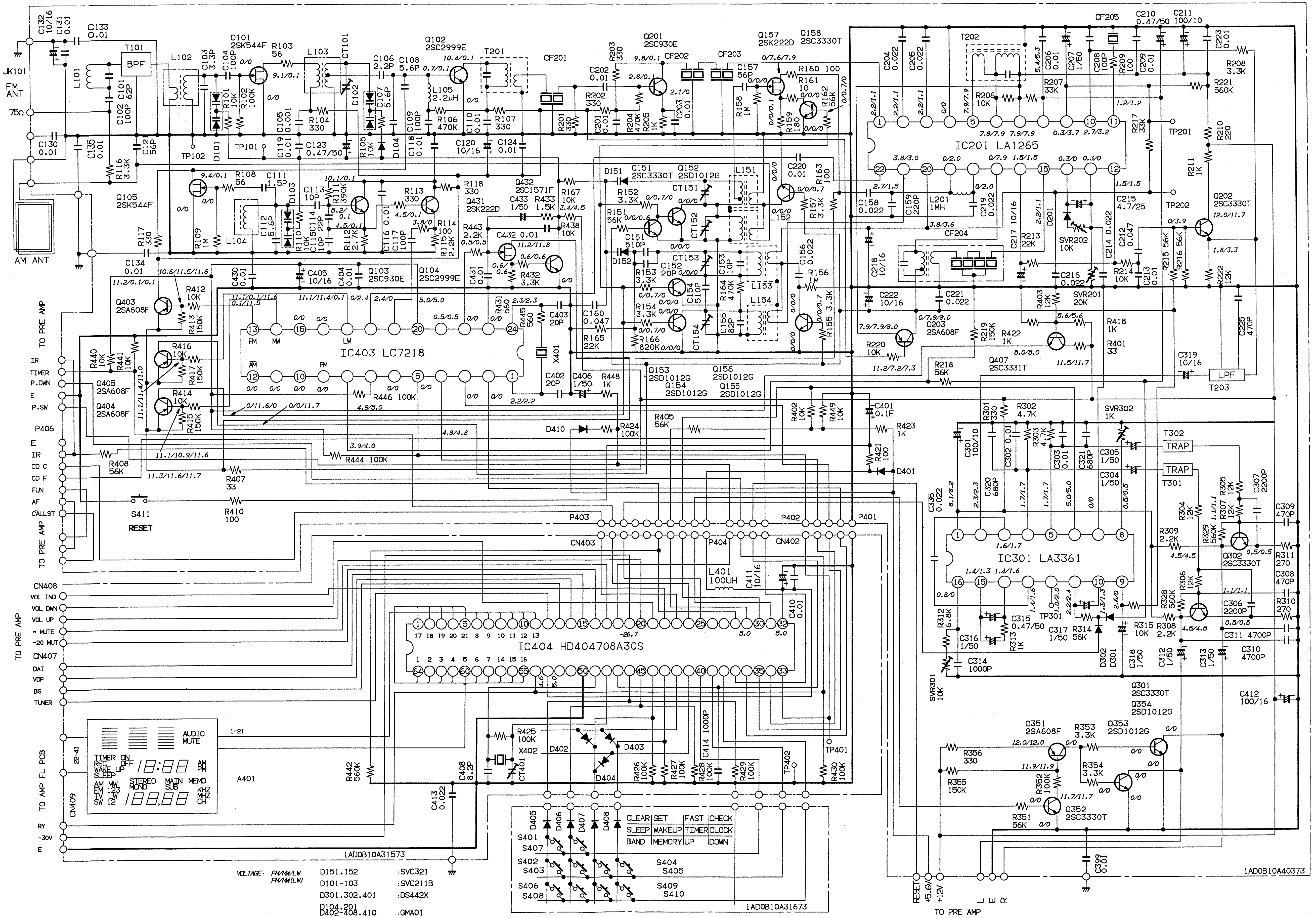
WIRING DIAGRAM (CD)

CD MAIN PCB


IC101
LA9200NM
IC401
LC7860N
IC402
IC301
IC501
IC504
IC505
IC506
IC601
IC602
IC201
IC202
CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN11
CN12
CN13
CN15
T101
X301
X401
PLL
F.GAIN
T.BAL
T.GAIN
T.OFFSET
F.COIL
T.COIL
DUB.IN
C.COPY
REC LEVEL
MOJI
JW1
CAD FINE
K01
1AD4B10A30173
TO P.T
TO FRONT
TO P.AMP
RESET
LDON
GND
ELFG
LDON
TES.S
CLG.G
+5V
-5V
+9V
-9V
-30V
TP1
TP2
TP3
TP4
RF
FE
TE
DRF
THLD
SLED.V
C626
TO MAIN AMP PCB

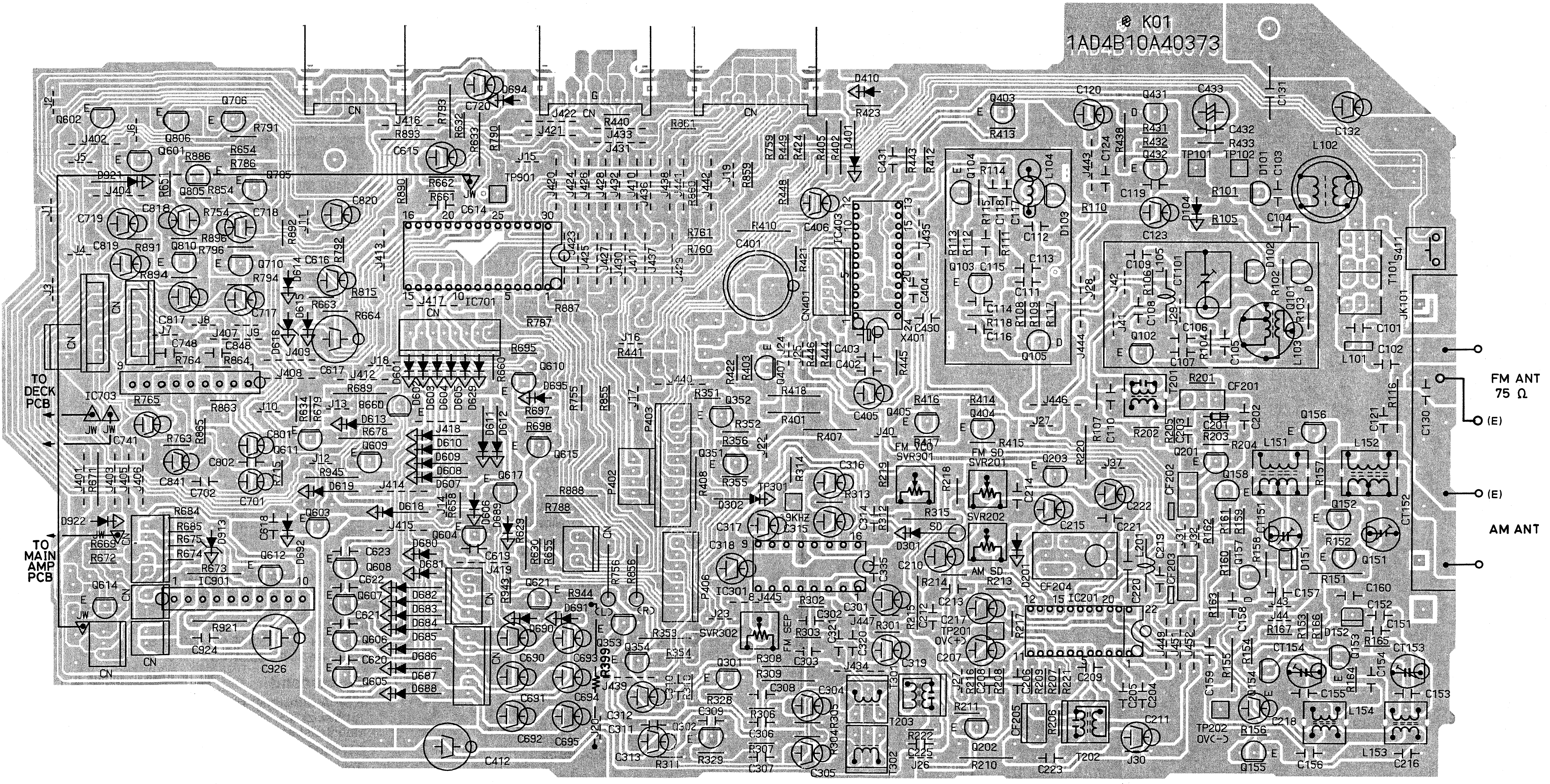
Note: C625—W.GERMANY
Note: C626—W.GERMANY

SCHEMATIC DIAGRAM (TUNER)


JK101
FM ANT
75Ω
AM ANT
T101
BPF
L101
L102
L103
L104
L105 2.2μH
CT101
Q101 2SK544F
Q102 2SC2999E
Q103 2SC930E
Q104 2SC2999E
Q105 2SK544F
Q201 2SC930E
Q157 2SK222D
Q158 2SC3330T
Q151 2SC3330T
Q152 2SD1012G
Q153 2SD1012G
Q154 2SD1012G
Q155 2SD1012G
Q156 2SD1012G
Q431 2SK222D
Q432 2SC1571F
Q403 2SA608F
Q404 2SA608F
Q405 2SA608F
Q202 2SC3330T
Q203 2SA608F
Q407 2SC3331T
T201
T202
CF201
CF202
CF203
CF204
CF205
L151
L152
L153
L154
L201 1MH
TP101
TP102
TP201
TP202
TP301
TP401
TP402
IC201 LA1265
IC403 LC7218
IC301 LA3361
IC404 HD404708A30S
X401
X402
SVR201 20K
SVR202 10K
SVR301 10K
SVR302 1K
LPF
T203
T301 TRAP
T302 TRAP
D151
D152
D201
D301
D302
D401
D402
D403
D404
D410
L401 100UH
CT401
Q301 2SC3330T
Q302 2SC3330T
Q351 2SA608F
Q352 2SC3330T
Q353 2SD1012G
Q354 2SD1012G
TO PRE AMP
IR
TIMER
P.DWN
E
P.SW
P406
CD C
CD F
FUN
AF
CALLST
S411
RESET
CN408
VOL IND
VOL DWN
VOL UP
- MUTE
-20 MUT
CN407
DAT
VDP
BS
TUNER
TO AMP FL PCB
CN409
RY
-30V
P401
P402
P403
P404
CN402
CN403
AUDIO
MUTE
TIMER ON OFF
REC
WAKE UP
SLEEP
AM MW
FM LW
STEREO
MONO
MAIN
SUB
MEMO
KHZ
MHZ
A401
1-21
22-41
1AD0B10A31573
1AD0B10A31673
1AD0B10A40373
CLEAR
SET
FAST
CHECK
SLEEP
WAKEUP
TIMER
CLOCK
BAND
MEMORY
UP
DOWN
S401
S402
S403
S404
S405
S406
S407
S408
S409
S410
D405
D406
D407
D408
RESET
+5.6V
+12V
L
E
R
TO PRE AMP
VOLTAGE: FM/MW/LW
FM/MW(LW)
D151.152 :SVC321
D101-103 :SVC211B
D301.302.401 :DS442X
D104.201 D402-408.410 :GMA01

WIRING DIAGRAM (TUNER/PRE-AMP)

TU/PRE PCB


K01
1AD4B10A40373
TO DECK PCB
TO MAIN AMP PCB
FM ANT 75 Ω
(E)
(E)
AM ANT
IC701
IC703
IC901
IC301
IC201
IC403
CN
FM SEP SVR302
FM VCO SVR301
FM SD SVR201
SVR202 AM SD
19KHZ
TP101
TP102
TP201 0V(+)
TP202 0V(−)
TP301
TP901
JK101
S411
L102
T101
X401

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